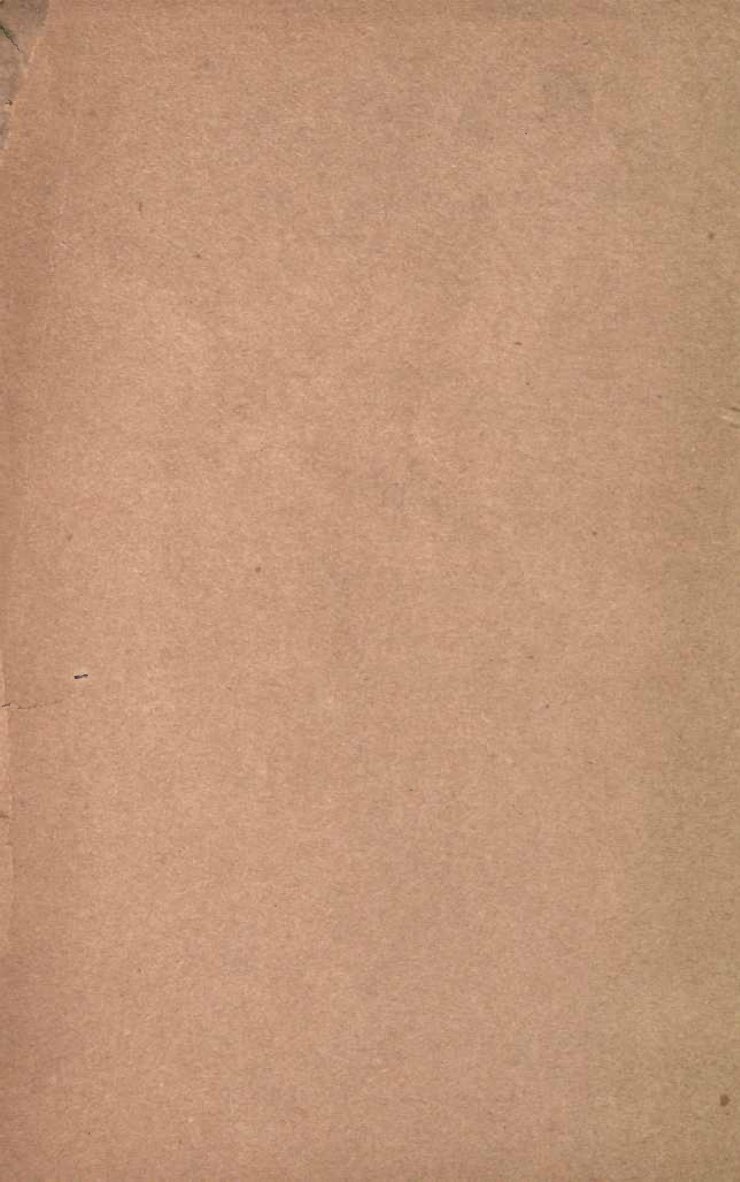


From the collection of the

o Pre^{z n m}linger^a
v Library
t p

San Francisco, California
2006

257 North Hobbs
Chabash



Mr A H Baker



Yours truly,

J. L. Nichols.

THE BUSINESS GUIDE;

OR,

SAFE METHODS OF BUSINESS,

BY
J. L. NICHOLS, A. M.,
PRINCIPAL OF THE NORTH-WESTERN BUSINESS COLLEGE,
NAPERVILLE, ILLS.

WITH
AN INTRODUCTION
BY
PRESIDENT A. A. SMITH, A. M.,
Late President Emeritus of the North-Western College.

FORTY-EIGHTH EDITION.

OVER 1,000,000 COPIES SOLD.

PUBLISHED BY
J. L. NICHOLS,
NAPERVILLE, ILLS.,
To whom all communications must be addressed.

AGENTS WANTED.

1895.



BENJAMIN FRANKLIN.

Seest thou a man diligent in his business?
He shall stand before kings.

Prov. 22:27.

Entered according to Act of Congress, in the year 1886,
By J. L. NICHOLS,
In the office of the Librarian of Congress, at Washington, D. C.

Entered according to Act of Congress, in the year 1891,
By J. L. NICHOLS,
In the office of the Librarian of Congress, at Washington, D. C.



PRESIDENT A. A. SMITH,
WHO, FOR OVER FIFTY YEARS, WAS ONE OF THE MOST PROMINENT
AND INFLUENTIAL EDUCATORS OF AMERICA.

INTRODUCTION.

THIS little book, "THE BUSINESS GUIDE," will recommend itself to all who desire, in a cheap form, full information as to methods of doing business. It contains all that is practical and valuable in Hill's Manual, Gaskell's Compendium, and other books of like character. It is a complete hand-book of business law and business forms. Besides, it contains a Business Dictionary, many useful tables, abbreviations and information, important to all, upon various other topics.

For lack of that information which this book contains, business men lose thousands of dollars every day. Millions are lost in litigation, owing to careless habits, or to ignorance of the proper methods of doing business, to say nothing of the losses, for the same reason, by the trickery of confidence-men and sharpers in general.

Such a guide is a necessity to young men and young women to prepare them, by the adoption of correct and safe methods of business, for thoroughness and success. It is simple and comprehensive, adapted to the wants of every one, whatever his occupation may be. Its principles can be easily understood, and readily applied in practice.

It ought to be in the hands of every teacher, and of every scholar of sufficient age to understand business transactions. It deserves, indeed, a place in every household.

A. A. SMITH.

Naperville, Ill.

BUSINESS ENERGY.

"Blest work, if ever thou wert a curse of God, what must His blessings be!"—*J. B. Selkirk.*

"Our greatest glory is not in never falling; but in rising every time we fall."—*Confucius.*

We love our upright, energetic business men. Pull them this way and then that way and the other, they only bend, but never break. Trip them down, and in a trice they are on their feet. Bury them in the mud, and in an hour they will be out and bright. They are not ever yawning away existence, or walking about the world as if they had come into it with only half their soul; you can not keep them down; you can not destroy them. But for these the world would soon degenerate. They are the salt of the earth. Who but they start any noble project? They build our cities and rear our manufactories. They whiten the ocean with their sails, and blacken the heavens with the smoke of their steam-vessels and furnace-fires. They draw treasures from the mines. They plow the earth. Blessings on them.

THE YOUNG MAN'S CHANCE.

1. **The Opportunity.**—In the vast eternal commerce that ebbs and flows over the surface of this continent, the avenues of efforts are largely crowded. A great host of young men are looking anxiously to the future. Many of them seek to carve out a career of their own, and instead of being employees all their days, and subject to the beck and call of a master, likely in the shape of a combination or a far away official, it is natural they should seek life molded by themselves. With this in view, why is it not well to turn the thoughts of the young man to the desirability of reversing the order of things, and instead of seeking the crowded city with its temptations, seek the country with its freedom? Hence, consider the advisability of becoming a thrifty farmer!

2. **The Farmer.**—The only really independent member of the community is the farmer. He is secure of food at any rate; nature is so generous that a very little effort will get him enough to eat and drink. The growth of the cities and the creation of local markets makes certain the absorption of what the earth produces. Hence, the boys and girls who have hitherto looked forward to the city for living, should now turn towards the country as their hope and opportunity. True, the life of the farmer hitherto has been supposed to be one of great labor, of comparative poverty and narrowness of enjoyment, with small results possible. But, it need not be so; for the intelligent farmer, with a competent knowledge of chemistry, with the employment of the most recent inventions in machinery, with the variety of products which can be cultivated in grains, fruit, vegetables and animals, ought to find his calling a profitable one.

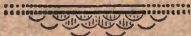
3. **City Life.**—The cities are full of the unemployed, and all sorts of vice, temptation and wickedness abound. A young man must inherit a strong character and possess a strong heart, who can stand the evil influence and avoid the snares of a great city. And if it is the lot of a young man to seek employment, let him remember that honesty, virtue and industry are the only stepping stones of success.

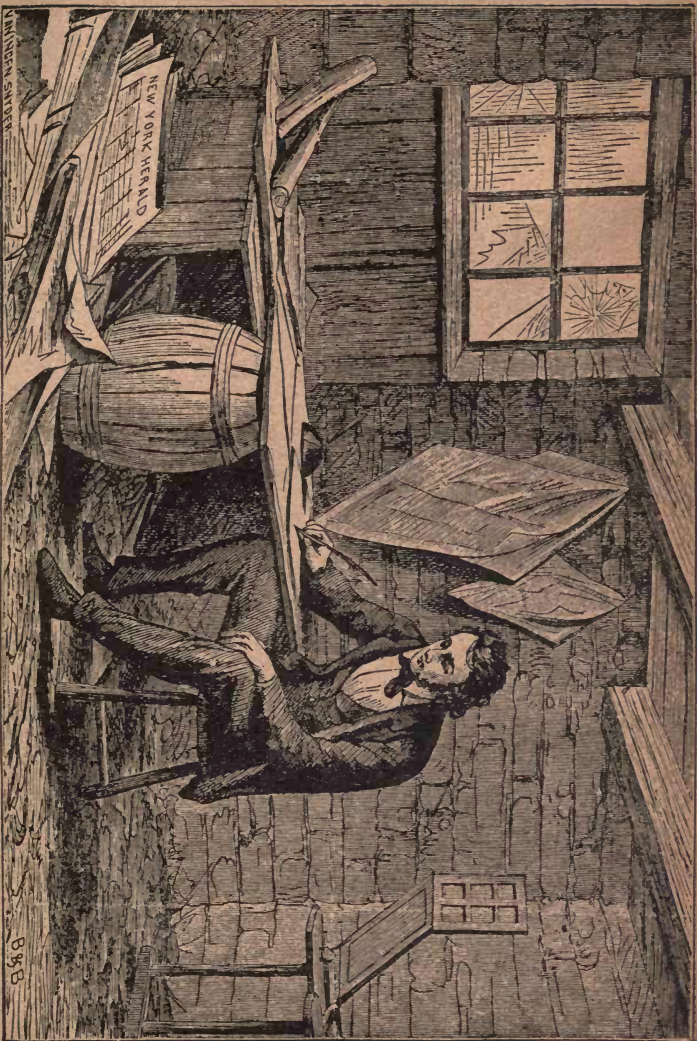
4. **The Farmer Boys.**—There is scarcely a prominent man in America, and scarcely a man of wealth, who was not born and raised upon the farm. It is the farm that has given health and brain to the great men of the nation. And the intellect to-day that is moving and shaping the destiny of the nation had its beginning and foundation laid in the quiet, restful home of the farm.

5. **Surest Success.**—A noble and full consecration of all your talents to the welfare of others is the surest course to your personal success, whether on the farm or in the city. There is a selfishness which is noble. It looks far ahead and becomes glorious as the sun by continually giving out. Or, like the ocean, receiving back in Mississippi and Amazons the drops of its beneficent dews which it has generously sent out to fatten the mountains and bless the valleys. The honest single purpose to make the world better is the beginner's great need. Let money, property, farms, fame, all stand aside when the great king of motives comes in. They are but satellites which are compelled by a positive law to revolve about the man who is great helpfulness. If humanity owned you, as in a measure it does, how would it invest your life so as to get the largest income from it? Where would wise and good men put you to obtain from your gifts the greatest possible good to their kind? Find out that and then put yourself there.

6. **Opportunities.**—Opportunities are the offers of God. Heaven gives us opportunity. Great opportunities are generally the results of the wise improvement of small ones. Wise men make more opportunities than they find. If you think your opportunities are not good enough, you had better improve them or make better ones. Remember you are responsible for the talents, for the time, and for the opportunities you now have; improve them as one that must give account. Make hay while the sun shines. Gather roses while they bloom. Start in business for yourself at the earliest opportunity.

7. **Town Life.**—If you have some means, start a small store in some thrifty little town; but be sure and get a little practical experience before investing all your capital. Go and work for some merchant a few months for nothing if you can't get employment without, but work to learn the business, and when understood embark for yourself.





JAMES GORDON BENNETT BEGINNING THE NEW YORK HERALD.

B&B



YOUNG LINCOLN CUTTING WOOD FOR HIS MOTHER.

YOUR REPUTATION.

Learn to be a man of your word. One of the most disheartening of all things is to be compelled to do business with a person whose promise is not to be depended upon. There are plenty of people in this wide world whose promise is as slender a tie as a spider's web. Let your given word be as a hempen cord, a chain of wrought steel that will bear the heaviest strain. It will go far in making a man of you, and a real man is the noblest work of God. The man who does not honorably meet his promises is not only dishonest but is also a coward; the man who dares not meet his obligations in good faith can frame no other excuse than that of cowardice.

CHARACTER.—HOW TO SUCCEED.

Young man, have a character of your own. Do not be a lump of moist putty molded and shaped by the influence and impressions of those whom you last met. Your reputation is made up by your conduct. Cultivate force, energy, self-reliance and be a positive quantity that can be calculated upon at all times and at all places. Be a man whose word is worth a hundred cents on a dollar and your reputation will be as good as gold.

HOW TO SUCCEED.

There is nothing so false in life as the idea that the fates choose victims to which shall be given only failure. Each man chooses for himself. Luck is an unknown quantity in life's vast problem, while Pluck solves all. The fates are only given to the habit of paying each man as he values himself. Place two boys at school together, of equal advantages as to birth, breeding, educational surroundings. The one will rise as high as humanity can rise, socially and financially, and die lauded of all men; the other will go down into his grave "unwept, unhonored, and unsung"—a beggar. Why? Because the one believed the world owed him a living, and would be proud of the chance of elevating him; while the other believed that the world owed him nothing, and would only give him what he wrestled from its hands by sheer force of will and determination. Nine tenths of the successful men in this country to-day have made their money by continuous strokes. They started out on life's journey knowing nothing of life, but everything of their own power, and determined to work on to the end. This is the true way to succeed.



BOYS WITH A FUTURE.

RICHES AND CHARITY.

"If thou art rich, thou art poor ;
For, like as an ass, whose back with ingots bows,
Thou bear'st thy heavy riches but a journey,
And death unloads thee."—*Shakspeare.*

1. **Thrifty in Order to be Generous.**—Man must be thrifty in order to be generous. Thrift does not end with itself, but extends its benefits to others. It founds hospitals, endows charities, establishes colleges, and extends educational influences. Benevolence springs from the best qualities of mind and heart. Its divine spirits elevates the benefactors of the world.

2. **Doing Good.**—The same feeling pervades our common humanity. The poorest man, the daily worker, the obscure individual, shares the gift and the blessing of doing good—a blessing that imparts no less delight to him who gives than to him who receives. If God blesses you with riches, remember your fellow man in need of bread.

3. **Power of Riches.**—The truth is, that we very much exaggerate the power of riches. Immense subscriptions are got up for the purpose of reforming men from their sinful courses, and turning them from evil to good. And yet subscriptions will not do it. It takes character to do the work; money never can. Great changes in society can never be effected through riches. To turn men from intemperance, improvidence, and irreligion, and to induce them to seek their happiness in the pursuit of proper and noble objects, requires earnest purpose, honest self-devotion, and hard work.

4. **Eager to be Richer.**—Men go on toiling and moiling, eager to be richer; desperately struggling, as if against poverty, at the same time that they are surrounded with abundance. They scrape and scrape, add shilling to sailing, and sometimes do shabby things in order to make a little more profit; though they may have accumulated far more than they actually enjoy. And still they go on, worrying themselves incessantly in the endeavor to grasp an additional increase of superfluity.

5. **Excess of Economy.**—Rich men are more punished for their excess of economy than poor men are for their want of it. They become miserly, think themselves daily growing poorer, and die the deaths of beggars. We have known several instances. They have nothing to think of but money, and of what will make money. They have no faith but in riches.

6. **Rich Men's Sons.**—Look over the history of this country and see what prominent men in business, in politics, or in the professions, are owing their present prosperity, influence and position to rich parents. They are not to be found. The rich men of to-day were the poor boys of forty years ago. They have labored their way to the front; they knew no such word as fail. Poverty is the great school of mankind. Out of the poor come our great reformers, and our wealthy, prominent and most influential citizens.

7. **It Is No Disgrace to Be Poor.**—The praise of the honest poverty has often been sung. When a man will not stoop to do wrong, when he will not sell himself for money, when he will not do a dishonest act, then his poverty is most



—:—: BREAKING HOME TIES, :—:—

honorable. But the man is not poor who can pay his way and save something besides. He who pays cash for all that he purchases is not poor, but well off. He is in a happier condition than the idle gentleman who runs into debt, and is clothed, shod and fed at the expense of his tailor, shoemaker and butcher.

POOR BOYS AND GREAT EMINENCE.

1. **The March of Fortune.**—Many men have been obscure in their origin and birth, but great and glorious in life and death. They have been born and nurtured in villages, but have reigned and triumphed in cities. They were first laid in the mangers of poverty and obscurity, but afterwards became possessors of thrones and palaces. Their fame is like the pinnacle which ascends higher and higher, until at last it becomes a most conspicuous and towering object of attraction.

2. **Noted Examples.**—Franklin was the son of a tallow-chandler and soap boiler. Daniel Defoe, hostler and son of a butcher. Whitfield the son of an inn-keeper. Shakespeare was the son of a wood stapler. Milton was the son of a money scrivener. Robert Burns was a plowman in Ayrshire. Mohammed, called the prophet, a driver of asses. Madame Bernadotte was a washer-woman of Paris. Napoleon was of an obscure family of Corsica. John Jacob Astor once sold apples on the streets of New York. Catherine, Empress of Russia, was a camp-grisette. Elihu Burritt was a blacksmith. Abraham Lincoln was a rail splitter. Gen. Grant was a tanner.

3. **George Peabody.**—A long time ago, a little boy twelve years old, on his road to Vermont, stopped at a country tavern, and paid for his lodging and breakfast by sawing wood, instead of asking for it as a gift. Fifty years later, the same boy passed that same little inn as George Peabody, the banker, whose name is the synonym of magnificent charities—the honored of two hemispheres. He was born poor in Danvers, Massachusetts, and by beginning right and pursuing a course of strict honesty, integrity, industry, activity and Christian benevolence, he was able to amass great wealth.

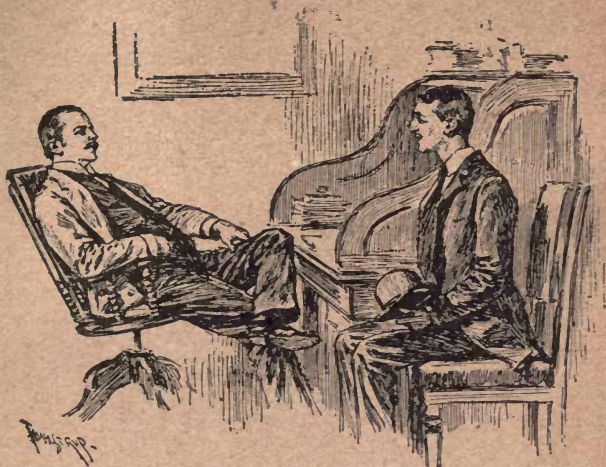
4. **Cornelius Vanderbilt.**—When Cornelius Vanderbilt was a young man, his mother gave him fifty dollars of her savings to buy a small sail boat, and he engaged in the

business of transporting market-gardening from Staten Island to New York City. When the wind was not favorable he would work his way over the shoals by pushing the boat along by poles, putting his own shoulder to the pole, and was very sure to get his freight in market in season. This energy gave him always a command of full freights, and he accumulated over \$20,000,000.

5. **Stephen Girard.**—Stephen Girard left his native country at the age of ten or twelve years, as a cabin boy on a vessel. He came to New York in that capacity. His deportment was distinguished by such fidelity, industry and temperance, that he won the attachment and confidence of his master, who generally bestowed on him the appellation of "My Stephen." When his master gave up business he promoted Girard to the command of a small vessel. Girard was a self-taught man, and the world was his school. It was a favorite theme with him, when he afterwards grew rich, to relate that he commenced life with a sixpence, and to insist that a man's best capital was his industry.

6. **Barefooted Boys.**—The barefooted boy of fifty years ago has been thinking and thinking aright, and thinking with no ordinary mind. He has placed the impression of his character upon the age. His industry, his business habits were developed in round, full and beautiful character. The barefoot boy of fifty years ago is to-day the prominent millionaire, the prominent business man, the prominent lawyer, the prominent statesman and the prominent philanthropist. Forty years ago J. B. Farewell came to Chicago with only a few dollars. Marshall Field, the prince of Chicago merchants, was a clerk in a Chicago store. In fact, take any of the prominent business men of Chicago of to-day and you will find that forty years ago they began life without a dollar.

7. **Necessity Is Always the First Stimulus to Industry.**—An eminent judge, when asked what contributed most to success at the bar, replied, "Some succeed by great talent, some by high connections, some by miracle, but the majority by commencing without a shilling." So it is a common saying that the men who are most successful in business are those who begin the world in their shirt-sleeves; whereas those who begin with fortunes generally lose them. Necessity is always the first stimulus to industry, and those who conduct it with prudence, perseverance and energy, will rarely fail.



GIVING A YOUNG MAN GOOD ADVICE.

WHERE TO GET RICH.

1. There is not a young man in the country who is not trying to solve the problem, where he can get rich; but, echo answers, "A rolling stone gathers no moss."

2. **We All Have Riches.**—Every man has a faculty or a peculiar fitness for some kind of business or employment. Every man is good for something, and honesty, perseverance, temperate habits, will bring it out. We all have riches, but the question is, where are they? Riches are everywhere about us, there are men who are getting rich and accumulating property in the store, on the farm, in the work shop, in the office, and everywhere about us. Wealth is close to the spot where you sit and read these pages, it may be in the shop, in the store or on the farm. They are not far off. Men are succeeding and accumulating property everywhere, and there is nothing to prevent you from achieving the same or similar prosperity. Don't run all over the country to get rich, for riches are right within your reach.

3. **Where Can I get Rich?**—Rev. Russell H. Conwell answers the question best. "You can get rich right where you are. At home. Not somewhere else. Not a man has secured great wealth by going away who might have secured

as much by some other means if he had stayed at home. To secure wealth is an honorable ambition, and is one great test of a person's usefulness to others.

4. **Money Is Power.**—Every young man and woman ought to strive for power to do good with it when obtained. Tens of thousands of men and women get rich honestly. But they are often accused by an envious, lazy crowd of unsuccessful persons of being dishonest and oppressive. I say, Get rich, get rich! But, get money honestly, or it will be a withering curse. Money being power it ought to be in the hands of good men and women. It is more largely so than many are willing to admit. We hear of the speculator, and the mine operator and the gambler, who, like a burning meteor, crosses our vision with his cursed ill-gotten gains, which burn him as he flies; but, not much is said of the thousands and thousands of solid men and women whose millions in the aggregate completely hide the gambler's fortune. One hundred men at least get rich honestly where one succeeds in filling his pockets with stolen, blood stained gold. The very law of nature and social life, all set against dishonorable methods and give a double momentum to the rightful means.

5. **Rich Men.**—The Gould's, the Astor's, the Vanderbilt's, the Field's, the Stuart's and hundreds of other millionaires, were once as poor and in as humble circumstances as you are to-day. There is not a millionaire in America to-day, who has made his money himself, who forty years ago did not begin life without a dollar. There are poor boys about you, who in a few years will be the rich men of your community. Nearly every man and nearly every woman has some talent, some possession, some valuable gift which the world needs. God has given unto man powers and possibilities that cannot be estimated in dollars and cents. God, has created you rich, and it is a question whether you will use your powers rightly for the accumulation of wealth.

6. **Wealth and Riches Everywhere.**—There is not a piece of furniture, not a kitchen utensil, but will soon be improved, by someone. There is not an article of food on your table, but is demanded in some different form. There is not a vegetable in your garden, a kind of fruit in your field, or a specimen of fruit in your orchard, but is capable of many unknown uses to civilized man, in the discovery of which wealth must flow to that public benefactor. There is a great need of the composition and improvements you can make, and the world will enrich you if you do your duty. Honesty and industry are always rewarded.

7. **New Industries.**—A man in Michigan had a pond on his land, it was a small, unproductive farm, and the owner had neither means nor wherewith to improve it or drain it. In his poverty and perplexity the thought occurred, that he would make it a duck and goose farm. He has accumulated a fortune of over forty thousand dollars. The poor land and the annoying frog pond proved to be a gold mine. It only required a little thinking.

So there are possibilities everywhere, all about you, that will bring wealth and riches and a beautiful and happy old age, if you are willing to use the gifts with which God has endowed you.

8. **The Making of a Fortune.**—The making of a fortune is not all of life. It may no doubt enable some people to "enter society," as it is called; but to be estimated there, they must possess qualities of mind, manners, or heart, else they are merely rich people, nothing more. There are men in "society" now, as rich as Croesus, who have no consideration extended towards them, and elicit no respect. How—why? They are but as money bags: their only will is their till. The men of mark in society, the guides and rulers of opinions, the really successful men, are not necessarily rich men, but men of sterling character, of disciplined experience and of moral excellence. There are many things in this world worth more than money.



ASTORS FIRST TRIP FOR FURS

The Beginning of a Great Fortune—John Jacob Astor Buying Furs in Western New York.

PRACTICAL MAXIMS

FOR GETTING ON IN THE WORLD.

1. Remember, there is always room at the top.
2. Do you know that all our prominent millionaires, all our prominent statesmen, jurists and philanthropists, forty years ago were poor boys?
3. This is a grand age with grand opportunities, and he who is willing to work with an honest purpose for honest results, will make life a success.
4. Shun lawsuits, and never take money risks that you can avoid.
5. Remember that the rich are generally plain, while rogues dress well and talk smoothly.
6. Avoid the tricks of trade; be honest, and never misrepresent an article that you desire to sell.
7. Don't cultivate a sense of over-smartness.
8. True intelligence is always modest.
9. Remember that trickery, cheating and indolence are never found as attributes of a thrifty and a progressive man.
10. Endeavor to be perfect in the calling in which you are engaged.
11. A man of honor respects his word as he does his note.
12. Always live within your income; never spend more than you earn, but always save a little, and in time you will be found independent.
13. The only safe rule is, never to allow a single year to pass by without laying up something for the future.
14. Keep your eyes on small expenses. Small leaks sink a great ship.
15. **Do not be ashamed of hard work.** Work for the best salary or wages you can get, but work for anything rather than to be idle.
16. **A great many are looking for good salary and little work.** Those jobs are rather scarce and only an idle man will look for them. They are never found.

HOW TO RUIN YOUR CREDIT.

1. **Paying Bills Promptly.**—If your credit and business standing are good and it is your aim to keep them so, then do not allow little bills to run until you are dunned for them. If you are sometimes short and you borrow a small sum of money, pay it promptly at the first opportunity. If you run little credit bills do not let them run until your attention is called to them. Pay them within a proper time, and your credit and reputation will not suffer.

2. **Signing Notes for Others.**—If you desire to be secure and keep what you have, do not sign notes and bonds with every Tom, Dick and Harry that comes along. Of course, circumstances may arise where you may be justified in accommodating a friend. Caution and good judgment however are necessary. If it is understood that you are signing bonds and notes and obligations as security for others, your credit will soon become impaired. People do not care to trust a man who is lending his credit to others. Many men all over this country are to-day suffering for the necessities of life on account of signing notes for their friends. When you sign a note for another, see that you are made secure by some good collateral security.

3. **Allowing Obligations to Mature.**—If you have given a note, do not allow it to mature ; either pay it or secure an extension that will be satisfactory to the creditor. By meeting your business obligations promptly you will always have a sufficient credit to meet all your demands. But if you get into debt and are not able to meet your payments, your credit is gone and people will lose confidence in you at once. It costs less to do business on business principles than to be negligent and indifferent. The man who pays his bills promptly is the man who always succeeds best in business. He has a great advantage over his fellow competitor who is known as "slow pay," because he is always able to take advantage of a special bargain when offered.

4. **Speculation.**—Avoid hazardous speculation. Ten times to one you lose what you have. Do not be too eager to get rich all at once. Adopt the slower but surer method, and you will gain by it in the end.

5. **Honesty and Square Dealing.**—Honesty and square dealings will always pay a handsome profit. The rule may not succeed every time, but a day of reward will surely come. The man who does business upon the foundation of honesty and square dealing, in the long run enjoys the best and most profitable prosperity. Honesty is the best interest bearing investment that man can make.



BEHIND TIME.

1. **A Railroad Train** was rushing along at almost lightning speed. A curve was just ahead, beyond which was a station at which the cars usually passed each other. The conductor was late, so late that the period during which the down train was to wait had nearly elapsed, but he hoped yet to pass the curve safely. Suddenly a locomotive dashed into sight right ahead. In an instant there was a collision. A shriek, a shock, and fifty souls were hurled into eternity; and all because a conductor had been behind time.

2. **Bankruptcy.**—A leading firm in commercial circles had long struggled against bankruptcy. As it had enormous assets in California, it expected remittances by a certain day, and if the sums promised arrived, its credit, its honor and its future prosperity would be preserved. But week after week elapsed without bringing the gold. At last came the fatal day on which the firm had bills maturing to enormous amounts. The steamer was telegraphed at daybreak; but it was found, on inquiry, that she had brought no funds, and the house failed. The next arrival brought nearly half a million to the insolvents, but it was too late; they were ruined because their agent, in remitting, had been behind time.

3. **Minutes Are Often Worth Years.**—It is continually so in life. The best laid plans, the most important affairs,



Young Jackson Taking His First Lessons in Farming.

the fortunes of individuals, the weal of nations, honor, happiness, life itself, are daily sacrificed, because somebody is "behind time." There are others who put off reformation year by year, till death seizes them, and they perish unrepentant, because forever "behind time." Five minutes in a crisis is worth years. It is but a little period, yet it has often saved a fortune or redeemed a people. If there is one virtue that should be cultivated more than another by him who would succeed in life, it is punctuality; if there is one error that should be avoided, it is being behind time.

TO YOUNG MEN.

1. **You Are Wanted.**—Young men, you are wanted! From the street corners, from the saloons and playhouses, from the loafers' rendezvous, from the idlers' promenade, turn your steps into the highway of noble aim and earnest work. There are prizes enough for every successful worker, crowns enough for every honorable head that goes through the smoke of conflict to victory.

2. **Fail to Distinguish Themselves.**—But why do so few young men of early promise, whose hopes, purposes and resolves were as radiant as the colors of the rainbow, fail to distinguish themselves? The answer is obvious: they are not willing to devote themselves to that toilsome culture which is the price of great success. Whatever aptitude for particular pursuits nature may donate to her favorite children, she conducts none but the laborious and the studious to distinction.

3. **Great Men.**—Great men have ever been men of thought as well as men of action. As the magnificent river, rolling in the pride of its mighty waters, owes its greatness to the hidden spring of the mountain nook, so does the wide-sweeping influence of distinguished men date its origin from hours of privacy, resolutely employed in efforts after self-development. The invisible spring of self-culture is the source of every great achievement.

4. **Dig After Knowledge.**—Away, then, young man, with alldreams of superiority, unless you are determined to dig after knowledge, as men search for concealed gold! Remember, that every man has in himself the seminal principle of great excellence, and he may develop it by cultivation as he will try. Perhaps you are what the world calls the

What of that? Most of the men whose names are as household words were also the children of poverty.

5. **Self-Cultivation.**—Up, then, young man, and gird yourself for the work of self-cultivation! Set a high price on your leisure moments. They are sands of precious gold, Properly expended, they will procure for you a stock of great thoughts—thoughts that will fill, stir and invigorate, and expand the soul. Seize also on the unparalleled aids furnished by steam and type in this unequalled age.

6. **Enter by Conquest.**—Man is born to dominion, but he must enter it by conquest, and continue to do battle for every inch of ground added to his sway. His first exertions are put forth for the acquisition of the control and the establishment of the authority of his own will. With his first efforts to reduce his own physical powers to subjection, he must simultaneously begin to subject his mental faculties to control. Through the combined exertion of his mental and physical powers, he labors to spread his dominion over the widest possible extent of the world without.

7. **Self-Control.**—Thus self-control and control over outward circumstances are alike the duty and the birthright of man. But self-control is the highest and noblest form of dominion. "He that ruleth his own spirit is greater than he that taketh a city."

8. **A Conscientious Young Man.**—There is no moral object so beautiful to me as a conscientious young man. I watch him as I do a star in the heavens; clouds may be before him, but we know that his light is behind them and will beam again; the blaze of others' popularity may outshine him, but we know that, though unseen, he illuminates his own true sphere. He resists temptation, not without a struggle, for that is not virtue, but he does resist and conquer; he bears the sarcasm of the profligate, and it stings him, for that is a trait of virtue, but heals the wound with his own pure touch.

9. **Onward.**—Onward, then, conscientious youth—raise thy standard and nerve thyself for goodness. If God has given thee intellectual power, awaken in that cause; never let it be said of thee, he helped to swell the tide of sin by pouring his influence into its channels. If thou art feeble in mental strength, throw not that drop into a polluted current. Awake, arise, young man! assume that beautiful garb of virtue! It is difficult to be pure and holy. Put on thy strength, then. Let truth be the lady of thy love—defend her.





WASHINGTON'S BOYHOOD.

WASHINGTON ON SWEARING.

On the 29th of July, 1779, General Washington issued a special order, at West Point, in reference to the practice of profanity:

"Many and pointed orders have been issued against that unmeaning and abominable custom of swearing, notwithstanding which, with much regret, the General observes that it prevails, if possible, more than ever; his feelings are continually wounded by the oaths and imprecations of the soldiers whenever he is in hearing of them.



THE TRAMP'S RETURN TO THE OLD HOMESTEAD.

"The name of that being from whose bountiful goodness we are permitted to exist and enjoy the comforts of life, is incessantly imprecated and profaned in a manner as wanton as it is shocking. For the sake, therefore, of religion, decency and order, the General hopes and trusts that officers of every rank will use their influence and authority to check a vice which is as unprofitable as wicked and shameful.

"If officers would make it an unavoidable rule to reprimand and, if that does not do, punish soldiers for offences of this kind, it could not fail of having the desired effect."

MONEY-MAKING AND MONEY-GETTING.

1. **Many Books Have Been Written.**—Many popular books have been written for the purpose of communicating to the public the grand secret of making money. But there is no secret whatever about it, as the proverbs of every nation abundantly testify.

2. **Popular Proverbs.**—"Take care of the pennies and the dollars will take care of themselves."

"A penny saved is a penny gained."

"Diligence is the mother of good luck."

"No pains no gains."

"No sweat no sweet."

"Sloth, the key of poverty."

"Work, and thou shalt have."

"He who will not work, neither shall he eat."

"The world is his who has patience and industry."

"It is too late to spare when all is spent."

"Better go to bed supperless than rise in debt."

"The morning hour has gold in its mouth."

"Credit keeps the crown of the cause way."

3. **Stood the Test of Time.**—Such are specimens of the proverbial philosophy, embodying the hoarded experience of many generations, as to the best means of thriving in the world. They were current in people's mouths long before books were invented; and, like other popular proverbs, they were the first codes of popular morals. Moreover, they have stood the test of time, and the experience of every day still bears witness to their accuracy, force and soundness.

4. **The Proverbs of Solomon.**—The Proverbs of Solomon are full of wisdom, as to the force of industry, and the use and abuse of money : “He that is slothful in work is brother to him that is a great waster.” “Go to the ant, thou slug-gard ; consider her ways and be wise.” Poverty, he says, shall come upon the idler, “as one that traveleth, and want as an armed man ;” but of the industrious and upright, “The hand of the diligent maketh rich.” “He who will not plough by reason of the cold, shall beg in harvest, and have nothing.” “The drunkard and the glutton shall come to poverty ; and drowsiness shall clothe a man with rags.” “The slothful man says there is a lion in the streets.” “Seest thou a man diligent in his business ? he shall stand before kings.” But above all, “It is better to get wisdom than gold ; for wisdom is better than rubies, and all the things that may be desired are not to be compared to it.”

5. **Simple Industry.**—Simple industry and thrift will go far towards making any person of ordinary working faculty comparatively independent in his means. Even a working man may be so, provided he will carefully husband his resources and watch the little outlets of useless expenditure.

6. **Love of Money.**—The saving of money for the mere sake of it, is but a mean thing, even though earned by honest work : but where earned by dice-throwing, or speculation, and without labor, it is still worse. To provide for others, and for our own comfort and independence in old age, is honorable, and greatly to be commended ; but to hoard for mere wealth’s sake is the characteristic of the narrow-souled and the miserly.

7. **Riches no Proof of Worth.**—Worldly success, measured by the accumulation of money, is no doubt a very dazzling thing ; and all men are naturally more or less the admirers of worldly success. But though men of persevering, sharp, dexterous and unscrupulous habits, ever on the watch to push opportunities, may and do “get on” in the world ; yet it is quite possible that they may not possess the slightest elevation of character, nor a particle of real greatness.

8. **Mind and Heart.**—But neither a man’s means nor his worth are measurable by his money. If he has a fat purse and a lean heart, a broad estate and narrow understanding, what will his “means” do for him—what will his “worth” gain him ? Let a man be what he will, it is the mind and heart that make a man poor or rich, miserable or happy ; for these are always stronger than fortune.



Young Peabody Sawing Wood for a Night's Lodging.

He became one of the first Millionaires and Philanthropists of America.

HINTS TO YOUNG FORTUNE HUNTERS.

1. Do Not Mortgage Your Future.—Do not mortgage your future, it may be useful to you hereafter.

The surest way to mortgage your future is to incur indebtedness.

The only excuse for debt is the immediate prospect of profit.

Incur no debt, except for that on which you can readily realize, in order to pay what you owe.

2. The Generous and Judicious Use of Credit.—Three-fourths of all the progress in this new world has been achieved by the generous and judicious use of credit. The three-fourths of all the anxiety that prevades society has come from the abuse of credit. Like every other blessing, "the greater the good the nearer the evil." Always take a week to decide whether you should go into debt or not. A week's delay may save years of sorrow.

3 Get Land.—If you cannot get land, get a section of a "corner," because trusts, combinations and consolidations have come to stay. They are the economic features of the hour. Shares in a well managed trust or combination, at a reasonable price, are, generally speaking, a big investment. The poor are robbed to make richer the rich.

4. Increase of Population.—Land near great cities of rapid growth is likely to be exceedingly valuable. Good farm land is sure to grow in favor. There are boys now living who will witness an increase of population until this nation reaches 130,000,000 of souls. Think of it! These have all to be fed, and only from the farmer and fisherman can food be derived. Hence, good farm lands are likely to advance in value.

5. No Blood Stained Fields.—Business, in every age of the world, has been the chief pioneer in the march of man's civilization. Blessings everywhere follow its advancing footsteps. It travels over no blood stained fields to secure its noble end, but everywhere brings man into friendly and harmonious intercourse. It removes local prejudices, breaks down personal antipathies, and binds the whole family of man together by strong ties of association and of mutual and independent interests. It brings men together, and towns and cities are built; it makes men venture upon the sea in ships, and traverse continents on iron pathways, and wherever we go, whether abroad or at home, it is business that controls the great interests of the world, and makes the efforts of men mighty.

6. How To Do Business.—One cannot do successfully what he does not perfectly understand. He may have competent employes or trusted attorneys to do his business, but they may do his work imperfectly, or seek their own ease or profit at his expense and he not being able to detect their malpractices must suffer the loss or perhaps fall. Or he may attempt to manage everything himself, commit fatal errors, as he will be almost sure to do, and thereby sustain a still greater loss. "First understand every detail of your business and then go ahead."

A wealthy farmer said, when asked how he made his money: "Sir, I understand my business and attend to it." In that reply is the sum and substance of all true success.





BUSINESS QUALIFICATIONS.

1. **Should Study Himself.**—The young man should, first of all, study himself. He should consider well the comparative development of the various faculties of his mind, his temperament, the powers of his physical constitution, and the tendency given to his mind by his early training. Let him ask himself, "What am I best fitted to do? What can I do best? What pursuit would be most attractive to me?" Let him avail himself of every opportunity to become acquainted with the various trades and professions, and then observing carefully the impression they make upon him and looking again at his own mental and physical character with reference to each, let him make his selection.

2. **Leading Requisite.**—The occupations whose leading requisite is mechanical ingenuity are generally called trades. A tailor, shoemaker, or brush maker need have but little ingenuity, but trades in general require a large share of it in combination with strength, mathematical skill and other qualifications. A machinist must have ingenuity, skill and a considerable degree of physical strength. A carpenter must have strength, ingenuity, great skill and an aptitude for mathematics and drawing. A stone mason must possess the same with perhaps greater power of endurance. A jeweler must have ingenuity, good taste, steadiness, application, and a capacity to resist temptation. A clockmaker or watchmaker must possess ingenuity, fair education, and a persevering disposition. A cabinet maker must have an aptitude for and a knowledge of drawing, good taste, and ingenuity. A chemist must possess ingenuity, a liberal education, retentive memory, and a persevering disposition.

3. **Good Address.**—Good address presupposes some education, a genteel person, and an obliging disposition. It is the leading requisite in all trading pursuits, and is the basis of successful storekeeping. United with fondness for books, the boy may become a bookseller; with fondness for music, a musicseller. An apothecary must possess good address, a good education, a retentive memory, and a cheerful, compassionate disposition. An auctioneer should have good address, memory, a quick eye, and shrewdness.

4. **Pay Equally Well.**—All kinds of regular business pay equally well in the long run to those who have the ability to carry them on; and that all useful employments by which a man can earn an honest living, are equally respectable in the estimation of every sensible person. "There is but one way," says Dr. Lyman Beecher, "of securing universal equality to man—and that is, to regard every honest employment as honorable, and that for every man to learn, in

whatsoever state he may be, therewith to be content, and to fulfill with strict fidelity the duties of his station and to make every condition a post of honor."

5. Disreputable Pursuits.—One word more. Let not the temptation of greater pecuniary gain induce you to engage in any business which the moral sense of the community and your own conscience brands as disreputable and wrong. No pursuit, the exercise or results of which are not beneficial to mankind, should ever be engaged in. There is enough useful work in the world for all.

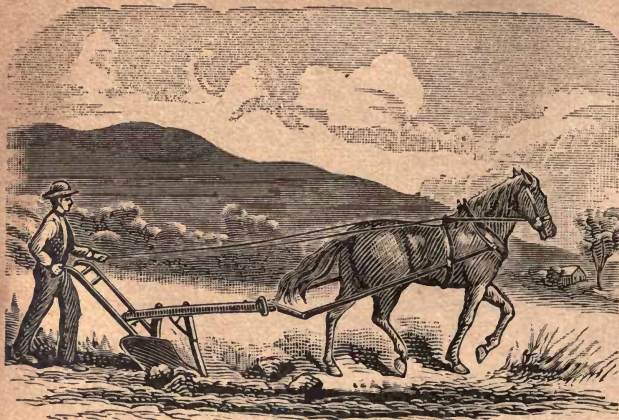
REFINEMENT IN BUSINESS.

1. Lack of Refinement.—Any lack of refinement in one's manner, or any incivility in one's ordinary personal address, ought certainly to be a matter of regret to the person whose daily life displays such a defect. But it is by no means uncommon for men and women to think, or to pretend to think, that rudeness of manner and neglect of the courtesies of life are evidences of a strong character; and that a coarse and uncivil habit of speech is an admirable proof that the speaker is a "plain, blunt man," who is above shams and pretences.

2. Always a Blemish.—Now, while coarseness and ill-manners may exist along with strength of character and righteousness of life, it is always a blemish and never a help. A business man must possess to some extent good manners and social refinement.

3. A Grave Mistake.—Every one who is trying to lead a good life, should also try to lead a winsome and courteous life. By abandoning gentleness of disposition and graciousness of word or deed, he throws away a means of growth and an effective weapon. It is almost always a grave mistake, in a matter of manners, or in any other matter, to try to put yourself on other people's level. If you are trying to do right, the chances are that, by adopting a coarse manner of speech or action, you will degrade yourself, and will fail in the good you seek. Rude and rough people are ready to excuse themselves for their own coarseness; but, after all, they despise it in those who are striving to instruct and help them. It always pays to cultivate your manners.

4. Cleanness and Brightness and Winsomeness, in thought and word and deed and manner and material surroundings, are always ready to help what is good. Coarseness and dinginess and ugliness are evils that must sometimes be endured, but ought never to be defended as virtues in themselves. A business man must be a gentleman.



CORNELIUS VANDERBILT EARNING HIS FIRST ONE HUNDRED DOLLARS.

PRACTICAL RULES FOR SUCCESS.

"Economy is itself a great revenue."—*Cicero*.

"Be not simply good, be good for something."—*Thoreau*.

1. Keep your health good by adopting regular and steady habits.
2. Never be afraid to say no. Every successful man must have the backbone to assert his rights.
3. Remember that steady, earnest effort alone leads to wealth and high position.
4. Be not ashamed to work, for it is one of the conditions of our existence. There is not a criminal who does not owe his crime to some idle hour.
5. Never covet what is not your own.
6. Remember that time is gold.
7. To industry and economy add self-reliance. Do not take too much advice, think for yourself. Independence will add vigor and inspiration to your labors.
8. Don't be selfish. Selfishness is the meanest of vices, and the parent of a dozen more. Selfishness keeps a penny so close to the eye that it can't see a dollar beyond.
9. Never forget a favor, for ingratitude is the basest trait of a man's mean character.
10. Never taste or touch that which befogs the mind or dethrones the reason. A drunken man is always at the mercy of his enemies.



THE EARLY HOME OF ABRAHAM LINCOLN, WHO WAS KNOWN AS "HONEST ABE."

HONESTY.

No legacy is so rich as HONESTY.—*Shakespeare.*

He who freely praises what he means to purchase, and he who enumerates the faults of what he means to sell, may set up a partnership with Honesty!—*Lavater.*

What is becoming, is honest, and whatever is honest must always be becoming.—*Cicero.*

Nothing more completely baffles one who is full of trick and duplicity himself, than straight-forward and simple integrity in another.—*Colton.*

Truth and honesty show themselves in various ways. They characterize the men of just dealing, the faithful men of business, the men who will not deceive you to their own advantage. Honesty gives full measure, just weights, true samples, full service, and a strict fulfilment of every engagement.

The truth of the good old maxim, "Honesty is the best policy," is fully demonstrated every day of our life; and uprightness and integrity are found as successful in business

as in everything else. As Hugh Miller's worthy uncle used to advise him, "In all your dealings give your neighbor the cast of the bank—good measure, heaped up, and running over,—and you will not lose by it in the end." Truth is the essence of principle, integrity and independence, and every man needs it. Absolute veracity is more needed to-day than at any former period in our history.

Remember that honesty rises above fortune and above kings; by that alone, and not by the splendor of riches or of titles in glory acquired, that glory which it will be your happiness and pride to transmit unspotted to your posterity. Honesty is greatness itself; dishonesty never made a man great, and never will. Rather be and continue poor, while others around grow rich by fraud and disloyalty, rather be without place or power, while others beg their way upward; rather bear the pain of disappointed hopes, while others win their way by flattery, and forego the gracious pressure of the hand for which others cringe and crawl. Wrap yourself in the cloak of virtue, and seek your bread with an honest hand, and if you grow gray in this cause, with unsoiled honor bless God, and rejoice.

"The honest man, though e'er so poor,
Is king of men for all that."

GOOD MANNERS.

Manners are the ornament of action.—*Smiles.*

Guard manners, if you would protect the morals.—*Davidson.*

Sow good services; sweet remembrances will grow from them.

Mme. De Staël.

Good manners is the art of making easy the persons with whom we are brought in contact.—*Anonymous.*

Virtue itself offends when coupled with forbidding manners.—*Middleton.*

A good name is the best thing in the world; either to get one a good name, or to supply the want of it.—*Anonymous.*

An old saying, "politeness costs nothing, and accomplishes wonders," is a good one. Of course, politeness without sincerity is simply a refined form of hypocrisy, and sincerity without politeness is but little better. A savage, a barbarian can



be honest, but is not likely to be very polite. So politeness of speech and manners is the distinguishing trait between the civilized and the uncivilized.

A coarseness and roughness of speech, a studied effort to say things that grate upon or wound the feelings of a person possessing ordinary refinement, is utterly, inexcusably and wholly indefensible.

There are many persons, however, who seem to have the idea that because they are honest, sincere and sympathetic, after a fashion, they are excusable for being impolite, and consequently justified in cultivating boorish manners, and indulging in rough speech; but this is a mistake. It pays to regard the feelings of others, especially when it costs us nothing. It does not follow because a man is polite that he is therefore insincere. Politeness and sincerity can go together, and the man or woman who possesses both will get along much better than the individual who has either without the other.



It never costs anything to be polite, yet it is often worth a fortune.

BUSINESS MANNERS.

1. Be cheerful, and show proper civility to all with whom you transact business.
2. There are many who have failed in business because they never learned to respect the feelings or opinions of others.
3. Kindness of manners is the best capital to invest in a business, and will bear a higher rate of interest than any other investment.
4. Be accomplished, polite, refined, civil, affable, well-behaved and well-mannered, and you will never lose by it.
5. Manners make the business man, and give him the art of entertaining and pleasing all with whom he has business relations.
6. If you wish to change a man's views in reference to some business transaction or other negotiations, respect his opinions, and he will be respectful and listen to your arguments.
7. There are a thousand easy, engaging little ways, which we may put on in dealing with others, without running any risk of over-doing it.

YOUR PERSONAL APPEARANCE. 36a

1. **A Slovenly Dress.**—The personal appearance of an assistant is by no means a matter of indifference to an employer or to himself. A slovenly dress and a neglected person are a sort of a libel upon the principal; they seem to accuse him of paying insufficient salaries. Especially when one is in position of authority, where the respect and obedience of others is required. It is false economy to dress below one's position; for the world is very ready to take a man at his own estimation of himself.

2. **Neatness of Dress.**—Neatness of dress always indicates neatness in business; and the desk of a clerk might often be distinguished from that of another, by a glance at the dress of each occupant. Let every young man give this matter his special attention.

3. **Looking Seedy.**—How is it that so many who might make a respectable appearance look so very seedy in themselves and in their dress? Some by drink and late hours. The doors of the saloon garnished with seedy people tell plainly how and where those loungers have run into seediness. Their faces are wrinkled before their time, or else bloated; they are very puffed under the eyes and there is a little too much saffron in their complexion. They look as if their money served for anything but regular meals and good clothes. Some become seedy by simple neglect and indifference; by not having a love of keeping themselves up, by not having a dread of, and avoiding, the first step down; so the seediness sets in until by degrees it creeps all over a man; then he gets used to the sight of himself and continues seedy to the end. Some look seedy, or at least shabby, merely for want of a little natural taste.

4. **Seedy Homes.**—Seedy homes also have a wonderful tendency to make seedy husbands, seedy young men and seedy young women. You sometimes see a man who, while single, is as neat and tidy a specimen of humanity as any woman need wish to have, with his nice well-brushed hat, clean collar, white waist coat, neat fitting boots and all complete. But after marriage, his home becoming seedy, he follows the example: the curtains are seedy for want of brushing; the carpet and rug are only half swept; the staircase is seedy, for want of a shilling's worth of paint; the room smells seedy—a nasty, close smell—for want of ventilation; the wife looks seedy for want of ten minutes' care every mornng, and even the darling baby looks seedy with a dirty face and soiled pinafore.

5. **Good Women.**—Good women, never let your husbands get accustomed to seediness at home; and if they unhappily take a turn that way from the other causes we have named, let the freshness of their own homes make them feel out of place. Let the whole house, and, above all, yourself be to them a quiet but powerful lecture on *looking seedy!*

TELLING THE TRUTH.

All Truth is precious, if not all divine,
And what dilates the pow'r's must needs refine.—COWPER.

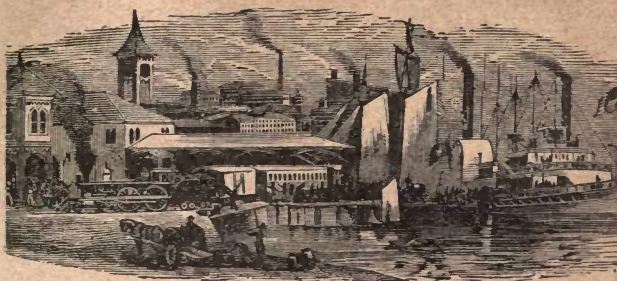
The greatest friend of Truth is Time ; her greatest majesty
enemy is Prejudice ; and her constant companion is Human-
ity.—COLTON.

1. **Lying Not Necessary.**—We would vigorously combat a notion, prevalent in some minds, that truthfulness and commercial prosperity cannot go hand in hand—that lying is a necessary part of trade. A business which cannot be conducted truthfully had better be abandoned. We must not be understood as recommending the divulging of business secrets, or the loquacious habit of taking all one's customers unto one's confidence. But we do recommend the cultivation of a candid, honest mode of dealings. This will be found in the end to be the best policy, and will add honor as well as riches to all who are willing to work and earn their money honestly.

2. **Lying Very Convenient.**—Many persons find lying very convenient; and thousands who would feel a very proper horror of swearing profanely, would not hesitate to tell a lie in the way of trade. *But lying is of all vices the lowest*, the meanest, and the most contemptible; and a man, once known as a deceiver, and upon whose word or promise no dependence can be placed, has lost his influence and nothing can save him. Dishonesty always breeds contempt, destroys credit and ruins prospects.

3. **Truth Is the Rule.**—A man may be frugal, he may be industrious, he may be persevering; but if he be a liar, good-bye to him. Don't tell me a lie is nothing in the way of trade—truth is the essence of trade; it is the life and soul of our mercantile greatness. In many countries deception is the staple of trade and is the rule of it, and truth is the exception; but happily such notions are going down rapidly, and—long may it last—truth is the rule, and deception the exception.

4. **Take the Leading Merchants** of our great cities, who conduct their business on business principles and allow no misrepresentations or deceptions of any kind, have one price for all customers, and they are the men who are building up a wide reputation and making princely fortunes. It pays to do right—and wrong doing is always a losing investment.



BUSINESS.

BUSINESS, in every age of the world, has been the chief pioneer in the march of man's civilization. Blessings everywhere follow its advancing footsteps. It travels over no blood-stained fields to secure its noble ends, but everywhere brings man into friendly and harmonious intercourse. It removes local prejudices, breaks down personal antipathies, and binds the whole family of man together by strong ties of association and of mutual and independent interests. It brings men together, and towns and cities are built; it makes man venture upon the seas in ships, and traverse continents on iron pathways, and wherever we go, whether abroad or at home, it is business that controls the great interests of the world, and makes the affairs of men mighty.

HOW TO DO BUSINESS.

One cannot do successfully what he does not perfectly understand. He may have competent employes or trusted attorneys to do his business, but they may do his work imperfectly, or seek their own ease or profit at his expense, and he not being able to detect their malpractices must suffer the loss, or perhaps fail. Or he may attempt to manage everything himself, commit fatal errors, as he will be almost sure to do, and thereby sustain a still greater loss. "First understand every detail of your business, and then go ahead."

A wealthy farmer said, when asked how he made his money. "Sir, *I understand my business* and attend to it." In that reply is the sum and substance of all true success.



YOUNG GARFIELD WATCHING WITH A SICK NEIGHBOR.

GARFIELD'S MAXIMS.

The Work of Education.—"The work of education partakes, in a peculiar way, of the spirit of the human mind in its efforts for culture. The mind must be as free from extraneous control as possible, must work under the inspiration of its own desires, and while instructors and books are necessary helps, the fullest and highest success must spring from the power of self-help."

Poor Boy.—"There is no boy, however poor, or however humble, orphan though he may be, that if he have a clear head, a true heart, a strong arm, may not rise through all the grades of society, and become the crown, the glory, the pillar of the State."

The Student.—"The student should first study what he needs most to know; the order of his needs should be the order of his work."

To a Young Man.—"To a young man who has in himself the magnificent possibilities of life, it is not fitting that he should be commanded; he should be a commander. You must not continue to be the employed, you must be the employer! You must be promoted from the ranks to a command. There is something, young man, which you can command—go and find it—and command it. Do not, I beseech you, be content to enter upon any business which does not require and compel constant intellectual growth."

The Privilege of Being a Young Man.—"The privilege of being a young man is a great privilege, and the privilege of growing up to be an independent man in middle life is a greater."

Poverty.—"Let not poverty stand as an obstacle in your way. Poverty is uncomfortable, as I can testify, but nine times out of ten the best thing that can happen to a young man is to be tossed overboard, and be compelled to sink or swim for himself. In all my acquaintance I never knew one to be drowned who was worth the having."

A Pound of Pluck.—"A pound of pluck is worth a ton of luck. Luck is an ignis fatuus. You may follow it to ruin, but never to success."

Success in Life.—"In order to have any success in life or any worthy success, you must resolve to carry into your work a fulness of knowledge, not merely a sufficiency, but more than a sufficiency.... Be fit for more than the thing you are doing. If you are not too large for the place, you are too small for it."

Standing by Their Own Convictions.—"The men who succeed best in public life are those who take the risk of standing by their own conviction."

"Victory is worth nothing, except for the fruits that are under it, in it, or above it."

"I would rather be beaten in right than succeed in wrong."

A Brave Man.—"If there be one thing upon this earth that mankind love and admire better than another, it is brave men—it is a man who dares to look the devil in the face and tell him he is a devil."





IT NEVER PAYS TO MISREPRESENT THE THING YOU ARE SELLING.

BUSINESS MAXIMS.

1. Your first ambition should be the acquisition of knowledge, pertaining to your business.
2. Above all things acquire a good, correct epistolary style, for you are judged by the business world according to the character, expression, and style of your letters.
3. During business hours attend to nothing but business, but be prompt in responding to all communications, and never suffer a letter to remain without an answer.
4. Never fail to meet a business engagement, however irksome it may be at that moment.
5. Undertake no business without mature reflection, and confine your capital closely to the business you have established.
6. Lead a regular life, avoid display, and choose your associates discreetly, and prefer the society of men of your own type.
7. Avoid litigation as much as possible, study for yourself the theory of commercial law, and be your own lawyer.
8. Never run down a neighbor's property or goods and praise up your own. It is a mark of low breeding, and will gain you nothing.

9. Never misrepresent, falsify, or deceive, have one rule of moral life, never swerve from it, whatever may be the acts or opinions of other men.

10. Watch the course of politics in national affairs, read the papers, but decline acceptance of political positions if you desire to succeed in a certain line of business. Never be an office-seeker.

11. Be affable, polite and obliging to everybody. Avoid discussions, anger, and pettishness, interfere with no disputes the creation of others.

12. Never form the habit of talking about your neighbors, or repeating things that you hear others say. You will avoid much unpleasantness, and sometimes serious difficulties.

13. Endeavor to be perfect in the calling in which you are engaged.

14. Make no investments without a full acquaintance with their nature and condition; and select such investments as have intrinsic value.

15. Never sign a paper for a stranger. Think nothing insignificant which has a bearing upon your success.

16. There is more in the use of advantages, than in the measure of them.

17. Of two investments, choose that which will best promote your regular business.

18. Never refuse a choice when you can get it.

19. Goods well bought are half sold.

20. Goods in store are better than bad debts.

21. By prosecuting a useful business energetically, humanity is benefited.

22. Keep accurate accounts, and know the exact condition of your affairs.

23. Be economical: a gain usually requires expense; what is saved is clear.

24. Reality makes no allowance for wishes or bad plans.

25. Write a good, plain, legible hand.

26. Never gamble or take chances on the Board of Trade.

27. Never take any chances on another man's game.

28. Never sign a paper without first reading it carefully.

29. Keep your word as good as a bank.

30. Remember that an honest man is the noblest work of God.



READING HISTORY.

GOOD ADVICE BY GREAT MEN.

What struggling, and scratching, and shifting, and lying, and cheating is practised every day by mammon worshipers in their eagerness to make money. What a comparison between the successful and the unsuccessful of the millions, who have entered upon the active duties of life's eventful journey. "Honesty is the best policy," and he who weds himself to that principle, though poor, makes life a success. *Anonymous.*

It is a mistake that capital alone is necessary to success. If a man has head and hands suited to his business, it will soon procure him capital. *John Freedley.*

Time is gold, throw not one minute away, but place each one to account. Do unto all men as you would be done by. Never give out that which does not first come in.

From McDonogh's tomb, New Orleans.

There is no boy in America, however humble his birth, who, in whatever capacity his lot may be cast, if he have a strong arm, a clear head, brave heart, and honest purpose, may not, by the light of our public schools and the freedom of our laws, rise until he stands foremost in the honor and confidence of the country.

Congressman Payson, Pontiac, Ills.

Punctuality is the mother of confidence. Be on time. Be frank. Say what you mean. Do what you say. So shall your friends know and take it for granted, that you mean to do what is just and right.

John Briggs.

Be honest, be temperate and never gamble.

John Jacob Astor.

Cut short your losses, and let your profits go on.

Recardo's Rules.

He that has never known adversity, is but half acquainted with others, or with himself, for constant success shows us but one side of the world.

Colton.

What though you have found no treasure, nor has any rich relation left you a legacy. Diligence is the mother of good luck, and God gives all things to *industry*. Then plough deep while the sluggard sleeps, and you shall have corn to sell and to keep. Work while it is called to-day, for one to-day is worth two to-morrows.

Franklin.

Make a bargain at once. Be an off-hand man. Be cautious and bold.

Rothchild's Business Rule.

Until men have learned industry, economy and self-control, they cannot be safely intrusted with wealth.

John Griggs.

When I caution you against becoming a miser, I do not therefore advise you to become a prodigal or a spendthrift.

Horace.

The way to gain a good reputation, is to endeavor to be what you desire to appear.

Socrates.

You may depend upon it, that he is a good man, whose intimate friends are all good.

Lavater.

Actions, looks, words, steps, form the alphabet by which you may spell "character."

Lavater.

The best rules to form a young man are, to talk little, to hear much, to reflect alone what has passed in company, to distrust one's own opinions, and value others that deserve it.

Sir William Temple.

Deliberate with caution, but act with decision, and yield with graciousness, or oppose with firmness.

Colton.

This above all—to thine own self be true,
And it must follow, as the day, the night,
Thou canst not then be false to any man.

Shakespeare.

GOOD ADVICE ON CONDUCT BY GREAT AUTHORS.

"Manners are the ornaments of action."—*Smiles.*

It is always easy to say a rude thing, but never wise.—*Stacy.*

Guard the manners if you would protect the morals —
Davidson.

Good temper is the essence of good manners.—*Anonymous.*

He that has no character is not a man: he is only a thing.
—*Chamfort.*

Sow good services; sweet remembrances will grow from them.—*Mme. De Stael.*

Good manners are the shadows of virtue, if not virtues themselves.—*Anonymous.*

In all professions and occupations, good manners are necessary to success.—*Mrs. Ward.*

Good manners is the art of making easy the persons with whom we are brought in contact.—*Anonymous.*

If you speak the sense of an angel in bad words, and with a disagreeable utterance, nobody will hear you twice who can help it.—*Chesterfield.*

It is a great misfortune not to have enough wit to speak well, or not enough judgment to keep silent.—*La Bruyere.*

One of the most effectual ways of pleasing and of making one's self loved is to be cheerful; joy softens more hearts than tears.—*Mme. De Sartory.*

To live with our enemies as if they may some time become our friends, and to live with our friends as if they may sometime become our enemies, is not a moral but a political maxim.—*Anonymous.*

Men's evil manners live in brass; their virtues we write in water.—*Shakespeare.*

To be more dear, congenial to my heart,
One native Charm, than all the gloss of art.—*Goldsmith.*

Honor and shame from no condition rise;
Act well your part, there all the honor lies.—*Pope.*

Loveliness needs not the foreign aid of ornament,
But is, when unadorned, adorned the most.—*Thompson.*



Correct Position at the Desk.

HOW TO WRITE.

A Complete Set of Rules for Position and Practice.

1. Sit in an upright and easy position. It will add to the ease and beauty of your writing. *Keep both feet on the floor.*
2. Hold the pen firmly, but not so tightly as to cramp the fingers.
3. Place the hand on the paper so the top of the holder will always point over the right shoulder. This will cause the points of the pen to press equally on the paper.

4. Keep the wrist from touching the paper or desk, and keep the thumb from bending while writing. Avoid the finger movement. It is not practical.

5. Let every downward stroke of the pen be drawn towards the center of the body, and the writing will have the correct slant.

6. Never practice carelessly. Always practice with a free and quick stroke. Let the movement be bold, free, offhand, resting the pen so lightly that the arm, hand and fingers can move freely together.

7. In making the shades, press on the pen with a gentle, springing movement. It will avoid heavy and irregular strokes.

8. Heavy shading, or shading every downward stroke, never adds beauty nor grace to the writing.

9. The thoughtful student in penmanship, as in other studies, will win. Think and write. Practice with perseverance, and your success will be certain.

10. To make the greatest improvement in the shortest time, practice upon the letters separately until you can make them all correctly.

11. Flourishes, too heavy shading, too large or too small letters, should be carefully avoided.

12. Practice writing by copying business letters, notes, drafts, receipts, etc., and you will improve your knowledge of business as well as your penmanship.



CORRECT POSITION OF THE PEN.



Business Writing

The business interests of the country demand that writing should be constructed in a manner consistent with speed and legibility — with little shade and no flourish.

PRACTICAL BUSINESS CAPITALS AND
COMBINED SIGNATURES.

A B C D E F G
H I J K L M N O
P Q R S T U V W
X Y Z &

J. M. Smith J. M. Smith.

J. B. Williams.

C. H. Ravens.

Business Alphabet.

A B C D E

a b c d e f g h i

J K L M N O

j k l m n o p q

R S T U V

r s t u v w x y z

P Q R S T U

V W X Y Z

Capital Letters.

A B C D

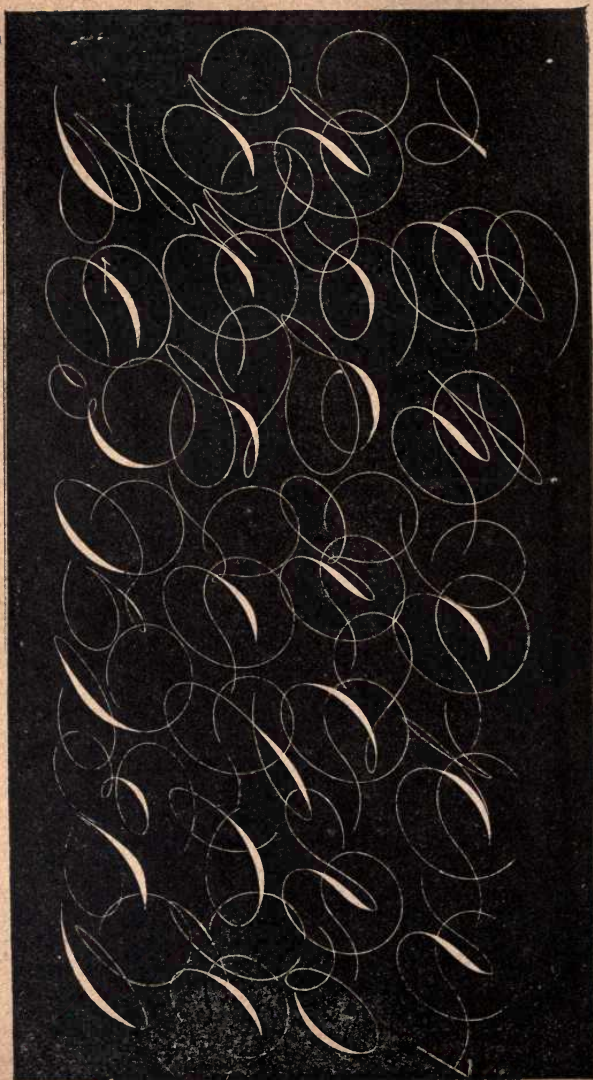
E F G H

I J K L

M N O P

Q R S T

U V W Y



St. Louis, Mo., Sept 4, 1884.
 Received of Samuel W. Hammond, Jr., on
 Commission, for Samuel Hammond, Director
 Hundred Barrels Flour.
 A. D. Smith, Jr.

Philadelphia, Canada Syracuse. N. Y.

Italian Capitals



A DRAFT.

\$720 ⁵⁰/₁₀₀

Austin, Texas, Sep. 21, 1889.

At ten days sight pay to the
 order of Katie Burk, Seven Hundred
 Twenty and ⁵⁰/₁₀₀ Dollars. Value received
 and charge to account of

Henry M. Cutter.

To M. A. Reynolds,
 Albany, N. Y.

Receipt and Due Bill.

\$72⁰⁰/₁₀₀
 Denver Colo. Sep. 21, 1889
 Received of Samuel Price Seventy-
 two Dollars, in full of all demands.
 W A Forvers

\$600⁰⁰/₁₀₀
 Chicago, Sep. 21, 1889
 Due Robt. Nelson, or order, on
 demand Six Hundred Dollars.
 D W Vosburg

Chicago Sep. 21 1889

Mr. Wm. Wells,

Bought of Saml. Cook,

Terms					
Sep. 1	2 doz. Samless Bags	31 ¹⁸	744		
"	4 lbs. Brown Sugar	7 ¹⁸	28		
"	166 " Rice	5 ¹⁸	30		
Received Payment,					802
Saml. Cook.					

St. Paul, Minn., Jan 6. 1891.
Goodnow & Simpson,

21 State St. Chicago.

Please deliver to the bearer
"one dozen copies Household Guides" and
charge the same to the account of

W. H. Gamertsfelder

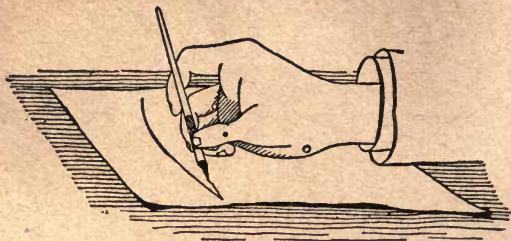
\$700 50/100

Mt Vernon, Ia., Feb. 12, 1891.

Received of Samuel D. Trummel
by the hand of George Ames Seven hundred
and 50/100 Dollars, in payment of services
rendered the said Samuel D. Trummel.

J. C. Westry

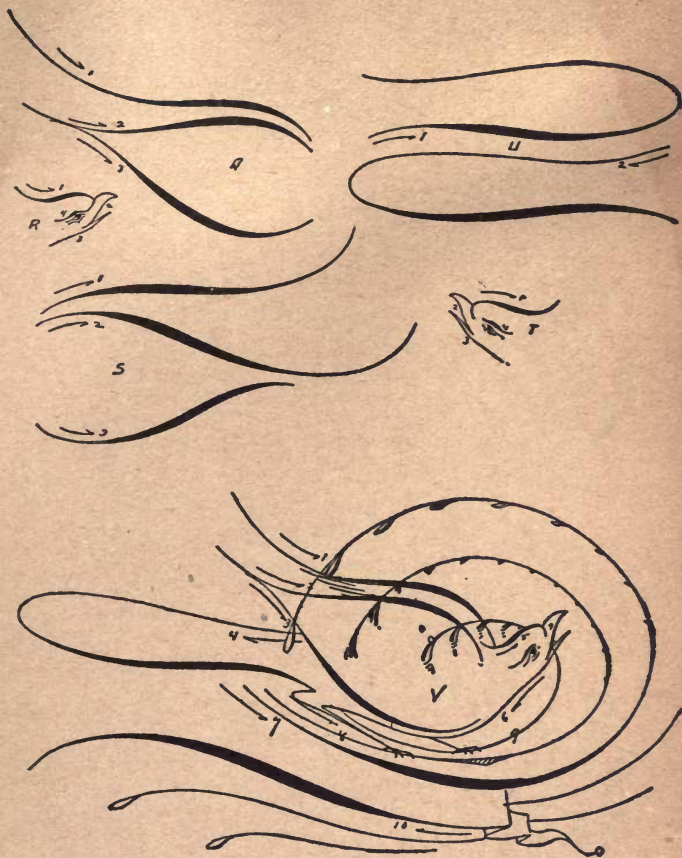
PRACTICAL LESSONS IN ORNAMENTAL PENMANSHIP.



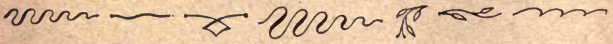
How to Hold the Pen for Ornamental Work.

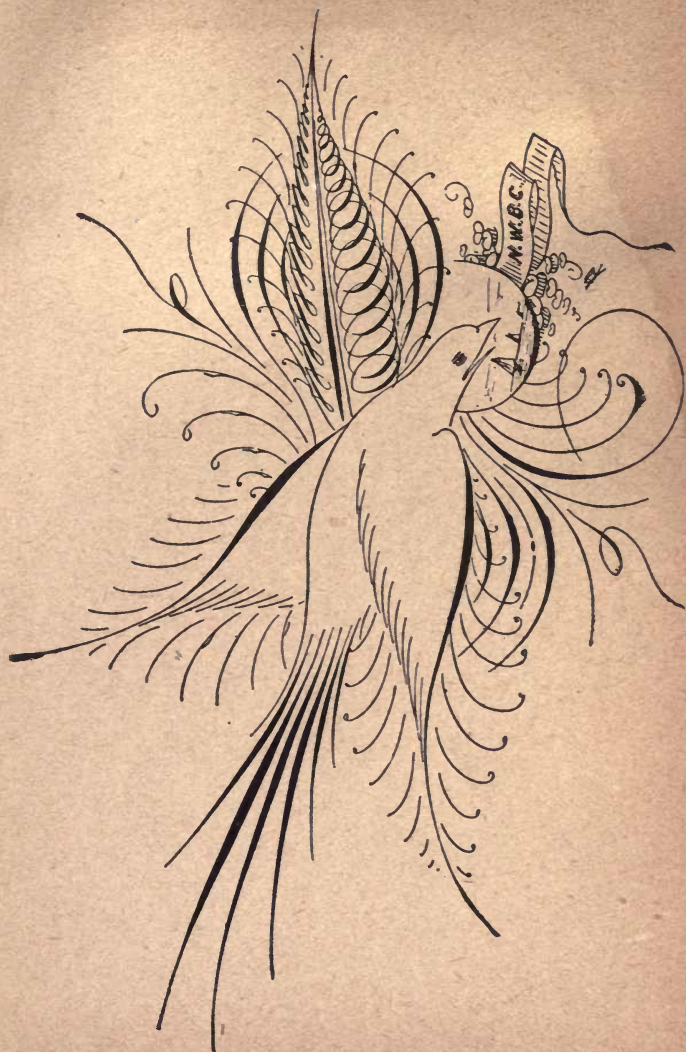


PRACTICAL LESSONS.

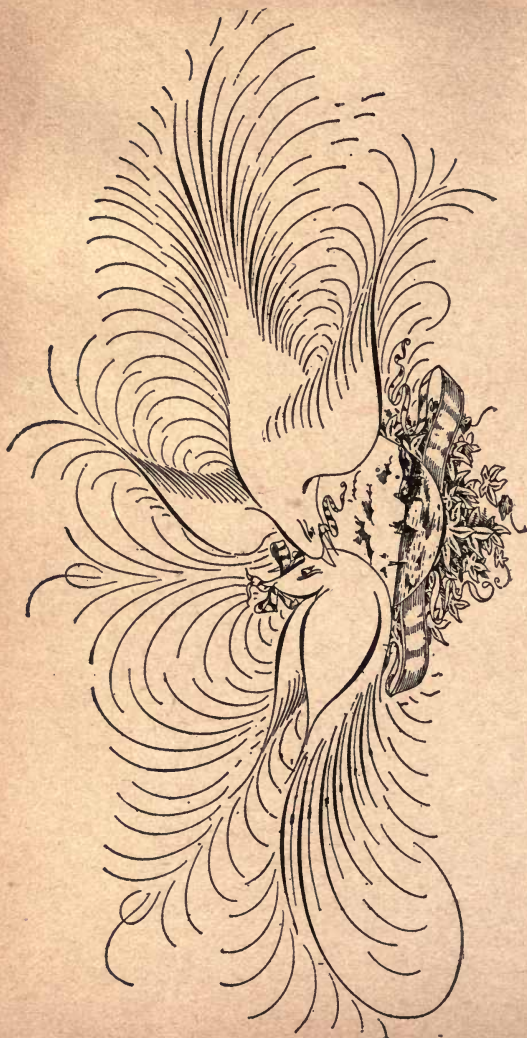


Exercises in Ornamental Penmanship.





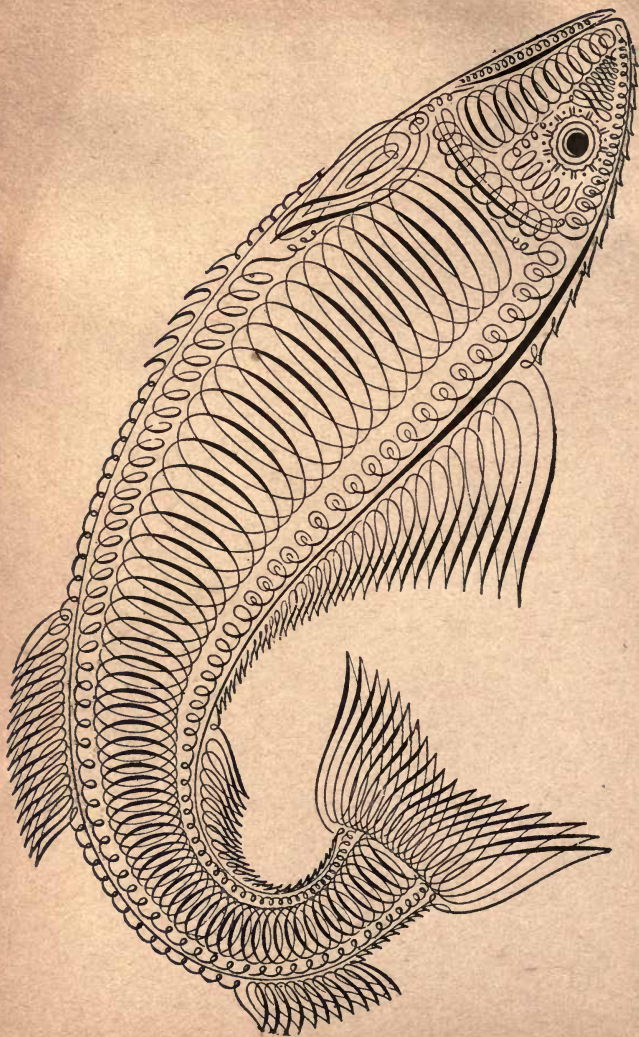
ORNAMENTAL PENMANSHIP.













ORNAMENTAL ALPHABET.

ALPHABET FOR MARKING BOXES AND PACKAGES.



A B C D E F G H I J K L M N

O P Q R S T U V W X Y Z &

a b c d e f g h i j k l m n

o p q r s t u v w x y z

abcde fghij klmnopqrstuvwxy

Selling Goods

Card Marking

At Cost

For Packages



FOR GERMAN WRITING.

A B C D E F G
 H I J K L M
 N O P Q R S T
 U V W X Y Z
 a b c d e f g h i
 j k l m n o p q r
 s t u v w x y z



For Pen Printing.

A B C D E F G
 H I J K L M N
 O P Q R S T U
 V W X Y Z
 a b c d e f g h i j
 k l m n o p q r s t
 u v w x y z

N. B.—Pen-printing as an exercise adds greatly to the improvement in penmanship.

SHORTHAND ALPHABET.

BY D. P. LINDSLEY.

THE MOST SIMPLE AND RAPID SYSTEM IN USE.

1	||	lllyll	11	/ /	✓✓✓✓✓
2	--	-----	12	✓✓	llllllll
3	||	lllyll	13	✓✓	llllll
4	ll	llllll	14	ll	llllllll
5	))	llllll	15	ll	llllll
6	((	llllll	16	ll	llllll
7	--	-----	17	--	llllllll
8	ll	llllll	18	ll	llllllll
9	ll	llllll	19	ll	llllllll
10	ll	llllll	20	ll	llllllll
			21	ll	llllllll

KEY TO THE ABOVE.

LETTERS.		KEY WORDS.		LETTERS.		KEY WORDS.	
1. Be, Pe.	Bay, pay, babe, pap, bib, pip.	11. Ray, Ar.	Ray, air, are, oar, dare.				
2. De, Te.	Add, at, did, dead.	12. Wa, Wha.	Way, woe, why, whey.				
3. Ga, Ka.	Gay, ache, gag, gig, cake, kick.	13. Ha, Ya.	Hay, ho, yea, you.				
4. Ja Cha.	Age, each, jig, chik.	14. A, Ai.	Ape, aid, air, fade, fair.				
5. Ve, Ef.	Eve, view, fee, five, fife.	15. At, Ah.	At, are, back, far.				
6. Zhe, Ish.	Azure, rouge, she, show, shoe.	16. E, Et, It.	Eat, egg, it, ill.				
7. Ze Es.	Oose, cwes, see, say.	17. Oo, oot.	Food, fool, foot, full, boom.				
8. The, Ith.	The, they, oath, thaw, thy.	18. O ut, O ut.	Bow, bone, coat, cut, but.				
9. En, Ing.	Nay, an, thing.	19. Au, ot, or.	Caught, cot, or, on.				
10. Em, El.	Me, aim, lay, lee, eel.	20. I U.	Buy, ice, die, dew.				
		21. Oi, Ow.	Coin, noise, how.				



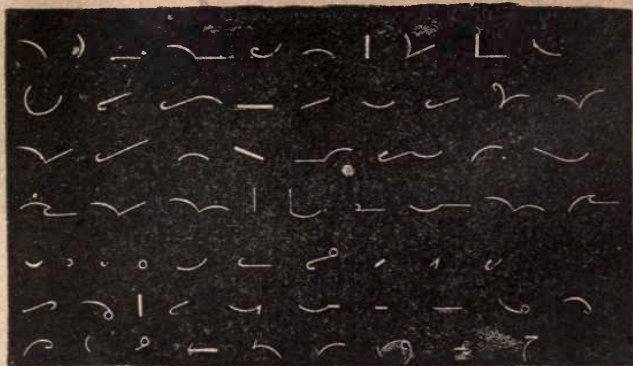
The way of the Lord is a right way. Do they wish to see me to-day? You may be there if you choose to do so. Those of us that came a day or two ago may go home very soon.



Her where could well come said says some son



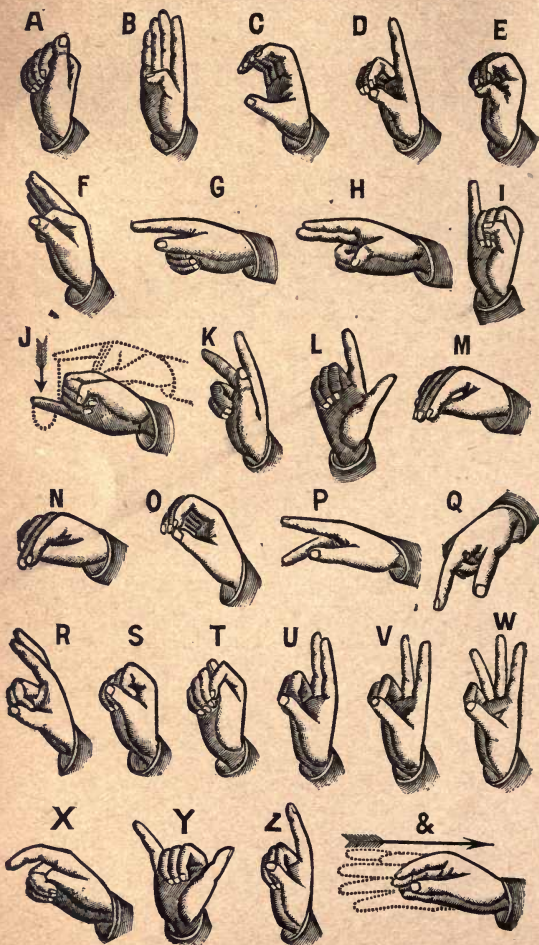
Also although any many wish tell let look



Word Signs.

the of to that you is be for but they
 shall he was do are on we from for
 there were us go home when my can
 such their those up upon it not thus much
 and in have as will which his all how what
 one this been had no new who it these then
 men should has head hath him himself whose whom

The Deaf and Dumb Alphabet.





Business Penmanship.

A B C D E F G
 H I J K L M N
 O P Q R S T U
 V W X Y Z

FIVE RULES FOR SPELLING.

[There is a great variety of rules for spelling, but most of them have so many exceptions as to be a hindrance rather than a help.

The following rules have few or no exceptions, and may therefore aid the learner.]

RULE I. Verbs of one syllable, ending with a single consonant, preceded by a single vowel, and verbs of two or more syllables, ending in the same manner, and having the accent on the last syllable, double the final consonant whenever another syllable is added; as *get*, *get'ting*; *o mit'*, *o mit'ted*.

RULE II. The plural of nouns ending in *y*, when *y* is preceded by a consonant, is formed by changing *y* into *i* and adding *es*; as, *li'l'y*, *li'l'ies*. When *y* final is preceded by a vowel the plural is formed by adding *s*; as, *val'ley*, *val'leys*.

RULE III. Nouns ending in *o* preceded by another vowel form their plurals regularly by adding *s* to the singular; as, *cam'e o*, *cam'e os*.

RULE IV. Words formed by prefixing one or more syllables to words ending in a double consonant retain both consonants; as, *be fall'*, *re buff'*. The exceptions are, *with al'*, *an nul'*, *dis til'*, *in stil'*, *ful fil'*, *un til'*.

RULE V. The word *full*, used as an affix, always drops one *l*; and its compounds, thus formed, make their plurals regularly by adding *s* to the singular; as, *hand'ful*, *hand'fuls*; *spoon'ful*, *spoon'fuls*.

 THE USE OF CAPITALS.

1. Every entire sentence should begin with a capital.
2. Proper names, and adjectives derived from these, should begin with a capital.
3. All appellations of the Deity should begin with a capital.
4. Official and Honorary Titles begin with a capital.
5. Every line of poetry should begin with a capital.
6. Titles of books and the heads of their chapters and divisions are printed in capitals.
7. The pronoun, *I*, and the exclamation, *O*, are always capitals.
8. The days of the week, and the months of the year, begin with capitals.
9. Every quotation should begin with a capital letter.
10. Names of religious denominations begin with capitals.
11. In preparing accounts, each item should begin with a capital.
12. Any word of special importance may begin with a capital.

PUNCTUATION.

Punctuation is a valuable art, easily acquired, yet too frequently neglected by a vast majority of letter-writers. Business men, as a class, seem to despise points as something beneath their notice. Others omit to punctuate through ignorance or carelessness. This is a great mistake, and many mistakes are made on account of this almost universal neglect to give more attention to punctuation.

IMPORTANCE.

Punctuation is very closely connected with the construction of sentences ; so closely that a clear expression of thought in writing is almost an impossibility without it.

Many illustrations might be given to show the importance of punctuation. A young man writing to a friend, says: "I was married last Sunday night for the first time in five years ; the church was full." He intended to say : I was married last Sunday night ; for the first time in five years the church was full.

We give another, where both the spelling and the punctuation are defective. A clergyman one Sunday morning received a note from a parishioner, which, in the haste, he read as written, thus :

"Capt. John Smith having gone to *see* his wife, desires the prayers of the church for his safe return." The note should have been written : Capt. John Smith having gone to *sea*, his wife desires the prayers of the church for his safe return.

These examples strikingly illustrate the importance of punctuation. And while they are of a simple and ridiculous character in a social sense, in a business letter they might be of very grave importance.

General rule: Punctuate where the sense requires it.

HOW TO WRITE A POSTAL CARD.

1. A card should be dated either on the upper right-hand corner, or on the lower left hand corner.

2. The writer's full name should be signed to it.

3. If an answer is required, the writer's full post-office address should be given, unless it is well known by the person to whom the card is directed.

4. Important matters should not be entrusted to a postal card, as it is open to inspection, and as the law does not provide for its return to the writer in case of failure to reach its destination. Nor is it allowable to use postal cards for notes of invitation, etc., in which society prescribes certain polite forms to be observed.

5. Never write a demand or request for money on a postal card. It is disrespectful to the person receiving it.

6. Postal cards can be sent to Canada and *Mexico*.



How to Improve Your Penmanship in Letter Writing.

1. Never be satisfied with mere legibility; for neatness, elegance and correctness are equally important.

2. Remember, carelessness and too much haste not only fail to improve your penmanship, but actually ruin what progress already attained.

3. Many persons write letters so hurriedly as to slur over the words, half forming and deforming many of the letters, or making sort of a wavy line to represent a word; this is not only an injury to the writer, but vexatious, unsatisfactory and disrespectful to the reader.

4. Write plainly and neatly as possible, rapidly if you can, slowly if you must. A neat and well worded letter of one page once a month, is better than a slovenly scrawl of four pages once a week.

5. When persons contemplate having a photograph taken, they often bestow much care upon their personal appearance, in order to heighten the effect of the artist in the presentation of their physical likeness. These same persons, however, will often sit down and write hurriedly an important letter, that from undue haste abounds in blots, illegible writing, erasures, bad spelling, and the wrong use of capital letters; without once thinking they are transmitting to their correspondent a kind of mental photograph of themselves, drawn by their own hand, and one, too, which better indicates their fitness for business or for society than the others.



How to Write a Business Letter.

1. In business letters use as few words as possible.
2. Business letters should be promptly answered.
3. Never use flourishes in a business letter or a business paper.
4. Never discuss or refer to social matters in a business letter. If necessary write two letters.
5. Always use black ink.
6. Give town, county, State and date, for it is frequently of great importance.
7. Read your letter carefully when written, and see that you have made no omissions and no mistakes. Also examine carefully your envelope when addressed.
8. Copy important business letters and preserve them.
9. In writing to others for information, a stamp should always be enclosed.
10. When it becomes necessary to request payment, it should be done in the most gentlemanly terms. There is more loss than gain in rash and insulting language.
11. In writing to a stranger, he is addressed as "Sir," or "Dear Sir." "My Dear Sir" implies very friendly relation. A married lady is addressed as "Madam," or "Dear Madam," an unmarried lady as "Miss," or "Dear Miss," usually with her last name affixed. "Rev. Sir," for clergymen: "Esteemed Sir," for formal friends; Judges and legislative officers should be addressed by the title of "Honorable." In writing to a firm, company or a number of persons, the address is "Gentlemen," or "Sirs," or "Dear Sirs."

12. In sending money, the amount should always be mentioned. When sent by draft, check, etc., it may be written in figures.

13. Postscripts are indicative of thoughtlessness, and should be avoided, except when absolutely necessary.

14. Numbers except dates and sums of money should be spelled in full, unless exceeding three words in length.

15. Never use the character "&," except in the title of firms, as Jones & Smith.

16. A letter of introduction or recommendation should never be sealed, as the bearer, to whom it is given, should know the contents.

17. In reply, acknowledge first the receipt of the letter, mentioning its date.

18. Avoid erasures or blots, even if compelled to rewrite the whole letter.

19. Avoid writing a letter with a lead pencil, and never write others than a business letter on a half sheet of paper.

20. Properly punctuate the letter, and be especially exact in placing the proper punctuation marks on the address of the envelope.

21. The repetition of the same words, should be carefully guarded against.

22. Use contractions and abbreviations very sparingly.

23. Letters of application should be very carefully written in the applicant's own hand writing, modest but self-respectful.

24. Never address a party in a letter or on an envelope by using both Mr. and Esq., only one is admissible.

25. Never write a letter on foolscap paper.

26. Gentlemen should always use white paper, ladies may use delicately tinted and perfumed paper.

27. Both paper and envelopes should be of fine quality. Envelopes should match the paper.

28. Letters as well as other compositions should be divided into paragraphs, and a blank margin should always be left on the *left-hand* side of the page, and not on the right.

29. Always leave a *margin* of a half inch or more at the left of the page. The margin should correspond to the size of the paper.

30. Letters or papers prepared for the press should be written only on one side.

31. The closing words of respect, friendship, etc., should be, Yours truly, Yours respectfully, Yours very sincerely, Respectfully yours, Yours ever, Your affectionate brother, Your loving daughter, Your obedient servant, etc., etc. A great variety is used.

32. Do not use big words or high sounding terms. Be simple in style, for simplicity is the one thing that cannot be ridiculous.

33. When testimonials are required, and you desire to preserve the original, a copy should be enclosed, and marked "copy" at the top of the page.

34. It is almost useless for a poor writer to apply for a situation in a business house, for merchants do not wish either the discredit or the inconvenience of bad writing.

35. Fold the letter neatly, and fit to the size of the envelope, for a carelessly written and clumsily folded letter denotes either ignorance or a want of proper respect to the person addressed.

36. Business letters often partake of the nature of contracts, and mistakes, omissions, or ambiguous language often results in serious loss.

37. A Letter of Congratulation—Is a letter written to a friend who has met with some special good fortune or great joy. It should be written in a style suited to the occasion, lively, cheerful and from all envy or prejudice.

38. A Letter of Condolence—Is a letter written to some friend who has suffered some grievous loss or bereavement. It should be consoling, comforting and full of sympathy.

Avoid calling up the harrowing details of the sad event, and do not attempt to argue the sufferer out of his (or her) sorrow.





HOW TO BEGIN A LETTER.

THE HEADING consists of place and date. In a city the number and street, city and state should be given. If the city is very large, such as Chicago, New York, Philadelphia, etc., the state need not be given.

Anyone writing from a large school, a college, a hotel, or any well known institution, generally writes the name of the institution with the place and date following. (See Form 5.)

ARRANGEMENT.—The first line on ruled paper is generally about an inch and a half below the top of the page. A letter should never begin much higher than that; but if the letter should be very short, it may begin still lower, so that the spaces above and below the letter would be about equal.

PUNCTUATION.—Always punctuate the parts of the heading as shown in the models.

THE ADDRESS consists of the name, title and residence (Post Office) of the persons written to.

SALUTATION is that term of politeness and respect with which we begin a letter; such as Sir, Dear Sir, Dear Friend, etc. In writing to a firm Sirs or Gentlemen should be used. Never use the abbreviations of "Gents" for Gentlemen or "Dr." for Dear or "Sr." for Sir.

Always state the most prominent part of your letter first.

Models for Beginning Letters.

FORM 1.

Wichita, Kas., Sept. 12, 1890.
 Messrs. Hall & West,
 58 Main St.,
 Austin, Minn.
 Gentlemen: Your favor of
 3d inst. at hand, etc.

FORM 2.

Naperville, Du Page Co., Ills.
 Nov. 25, 1890.
 Mr. F. J. Nichols,
 Ottawa, Ills.
 My Dear Sir: Please send by return
 mail, etc.

FORM 3.

229 Madison St., Chicago,
 Sept. 12, 1890.
 Mrs. Maggie Smith,
 Dear Madam.
 Accept thanks for
 the kindness you have shown me, etc.

FORM 4.

Cedar Falls, Iowa,
 Monday, Sept. 26, 1890.
 Miss Nellie Reynolds,
 Scotland,
 Conn.

We acknowledge with
 pleasure the receipt, etc.

FORM 5. (SOCIAL FORM.)

North-Western College,
 Naperville, Illinois,
 Sept. 20, 1890.

Dear Friend:

Your welcome letter arrived
 to-day, etc.

OTHER FORMS OF INTRODUCTION.

Rev. J. A. Meyers,
 Upper Sandusky, Ohio.
 My Dear Sir:

To the Editor of the Tribune,
 New York.
 Sir:—

To the Secretary of the Board of Education,
 Madison, Wis.
 Dear Sir:

F. Bickle, Esq.,
 Fairmount. Minn.
 Respected Friend:

NOTE.—The address is sometimes written at the close of a letter.



HOW TO CLOSE A LETTER.

1. Never write a letter without signing it, and write your name in full if the letter contains important matter.

2. Write your name plainly. Bad signatures often cause great inconvenience, and many times result in very serious mistakes.

3. If a lady is writing to a stranger, she should sign her name with her proper title, Miss or Mrs.

4. The complimentary close is written on the next line below the closing sentence, and the signature is written on the next line below the complimentary close.

MODELS FOR CLOSING.

COMMON FORMS.

Yours truly,
M. M. Matter.

Yours very truly,
Miss Kate Rourke.

I remain,
Yours respectfully,
J. C. Zehnder.

Sincerely yours,
Mrs. A. S. Barnard.

FORMS WITH ADDRESS.

Please address,
B. F. Simon,
West Salem, Ohio.

I am,
Yours truly,
B. M. Worthington.
To C. M. Smith.
Berlin, Ont.

We remain, dear Sir,
Your obedient servant,
C. W. Field.

Please direct to
N. W. B. College,
Naperville, Ills.

HOW TO ADDRESS AN ENVELOPE.

*Messrs. Wicks & Nichols,
No. 17 Monroe Street,
Chicago,
Ills.*

1. In writing the superscription, commence the name a little to the left of the center of the envelope. The *town* on the line beneath, and should extend a little to the right of the name. The *State* next below, should stand by itself, still further to the right. The *county* may be on the same line with the State, towards the left side of the envelope.

2. The county may be omitted where the town is a large metropolis.

3. Great care should be exercised in addressing letters. Give the full name and title of the person addressed. From the neglect of this precaution, thousands of letters are sent every month to the dead-letter office.

FORMS OF SUPERSCRPTIONS.

*Henry Lee,
Woodbury, N. Y.
Gloucester Co.*

*J. R. Price, Esq.,
Philadelphia,
104 Chestnut St. Pa.*

*Peter Thompson, Esq.,
Pres. of the Board of Education,
Naperville, Ills.*

Springfield, O., June 18, 1865
Messrs. W. Bell & Co.,
Cincinnati, O.

Gentlemen,— In reply to your letter of the 9. inst. relative to knowledge of Mr. W. Turner who was in my employ as bookkeeper for upwards of seven years.

During that time his conduct was such as not only to win for himself the good wishes and respect of all with whom we had business relations, but by strict attention to his duty, his punctuality, and above all by his integrity, so won my esteem, that no considerations could have induced me to part with him.

Serious illness alone causing him to resign the position he held.

Truly yours,
W. R. Graham.



Montreal, Oct. 7, 188-
Edward Trout, Esq.,
Toronto, Ont.

Dear Sir:

Enclosed find twenty
three dollars (\$23.⁰⁰) in full of my
account. Please acknowledge and
oblige

Respectfully yours,
Robt. Brown.



COMMERCIAL CORRESPONDENCE.

HOW TO WRITE A LETTER OF INTRODUCTION.

Naperville, Ills., Oct. 7, 1891.

Dear Sir: This will introduce to you my friend, F. D. Vincent, of this city. He intends staying a few days in your place, which he visits on business, and I take the liberty of recommending him to your kind attention.

He is a gentleman of excellent acquirements, and I know him to be responsible to the extent of his engagements. Any attention or favor that you render him will be considered a personal favor, which I shall be happy to reciprocate.

Very sincerely yours,

Chas. M. Hunter.

To Jared L. Morton, Esq.

Recommendation to a Young Man.**TO WHOM IT MAY CONCERN.**

This is to certify that the bearer, Mr. S. G. Auer, has long been known to me, and that he is a young man of good family, steady habits, and honest and conscientious in the performance of every duty.

He sustains an excellent reputation among his associates and neighbors. He is highly respected by all, and is possessed of a good education. We take pleasure in recommending him to any who may desire the services of an active, competent, and trustworthy young man.

J. A. WEIS.

A Tenant's Complaint.

Mr. G. J. STECHER,

Marseilles, Ky., March 12, 1891.

Upper Sandusky, Ohio.

Dear Sir:—Some time ago I called your attention to the condition of the house, for which we are paying a liberal rent. The drainage is in a bad condition, one of the chimneys is very defective, a large portion of the plastering from the ceiling in the north room has fallen down, and we are suffering continual annoyance owing to the bad condition of the house and premises. I trust it will not be necessary to notify you again that these things demand immediate attention. They must be remedied, or we shall be compelled to look elsewhere for another house.

Yours very truly,

ANNA HOLVERSON.

A Parent's Excuse to a Teacher.

MR. S. T. SMITH,

Will you please excuse my daughter Grace for non-attendance at school yesterday? She was detained on account of sickness.

Very respectfully,

MRS. F. J. DAVIS.

A Resignation.**TO THE DIRECTORS OF THE JOLIET LOAN ASSOCIATION.**

Gentlemen:—I herewith tender my resignation as secretary of your association, for reasons not altogether unknown to you. Same to take effect on the 15th day of April next.

Respectfully yours,

March 10, 1891.

J. L. STROHM.

Apologizing for Failure to Pay Money Promptly.

Mr. J. K. WEST,

Memphis, Jan. 14th, 1891.

Aurora, Ill.

Dear Sir:—I must really beg of you to defer the settlement of your account till after the middle of next month, when I shall be in a condition to meet your demand. Regretting that circumstances prevent my being more prompt in attending to your wishes,

I remain, Sir,

Yours very truly,

A. M. WINTERS.

Requesting Payment.

Messrs. DOUGLAS & HEARTH,

Naperville, Ills., Oct. 31, 1891.

St. Louis, Mo.

Dear Sirs:—We are obliged again to ask you for the balance of your account, now four months past due. We are much inconvenienced by your delay, and have waited longer than we think ought to be expected. The account must be speedily settled, and, if we do not hear from you by the 15th inst., will draw on you, at five days' sight. If the draft is not protected at maturity, we shall be compelled to adopt some other mode of settlement.

Yours truly,

ANDREW JAY.

Notice of Non-Payment.

To Messrs. WILLIAMS & FETTERS,
Chico, Cal.

Gentlemen:—You will please to take notice that a note for \$200, signed by John H. Wagner, dated May 29, 1885, due February 6th, 1886, and indorsed by you, was duly presented by me, the holder, to the maker for payment and was not paid, and that I shall look to you for payment thereof.

Respectfully,

R. W. DEWITZ.

Application for a Situation as Book-keeper.

Messrs. K. K. LANGTON & CO.,
Cincinnati, Ohio.

San Jose, Cal., Feb. 20, 1891.

Gentlemen:—Having learned from Prof. George Sindlinger that you desire the services of a book-keeper, I respectfully offer myself as an applicant for the situation. I have been engaged for two years in the wholesale house of Geo. Reuss & Co., as clerk and assistant book-keeper, and have a good knowledge of accounts. My business acquaintance is extensive in the western part of Kentucky, and I could therefore influence considerable trade. I enclose copy of testimonial from my late employers, and would also respectfully refer you, as to my character and ability, to

Messrs. S. A. Welty, Banker, Creston, Ia.,
W. Scott & Co., Merchants, Naperville, Ill.

Any communication which you may be pleased to make, addressed as above, will receive prompt attention.

Very respectfully yours,

F. T. GEIST.

Recommendation enclosed in the above copy.

San Jose, June 10, 1891.

The bearer, F. T. Geist, has been in our employ as assistant book-keeper for over two years, and we have always found him to be honest, steady, and correct in his habits and deportment, and well qualified for any position of trust in a counting-house. We cheerfully recommend him as a competent book-keeper and one who will earnestly apply himself to promote the interests of his employers.

Respectfully,

L. F. WENTZEL & CO.

A Student at School.

North-Western College, Oct. 2, 1891.

My dear Parents:—It will doubtless give you much pleasure to learn that owing to the kind attention of my teachers I have made so satisfactory a progress, that I have not only been promoted one class higher in the school, but have carried off the first prize in penmanship.

I sincerely hope that I may keep up to all the expectations you have formed of me, and which you have spared no pains or expense to realize.

With feelings of regret at leaving my kind teachers and school-mates, and delight at the prospect of my return home, I remain, my dearest parents, with kindest love to all at home,

Your affectionate child,

ELMER WICKS.

Application for a Catalogue.

Dover, Del., Aug. 3, 1891.

President THOMAS BOWMAN,
Naperville, Ill.

Sir:—Please send me a copy of your last catalogue and circular. I design attending school next winter, and wish to obtain information concerning your terms, course of study, etc. By complying with the above request you will oblige,

Yours, very respectfully,

M. H. SIGNOR.

Advertisement.

Wanted — A young man of ability to fill the position of entry-clerk in a dry goods house. One who has had some experience in dry goods business preferred.

Address with reference, X. L. M., Box 1024, P. O.

Replies.

Mr. X. L. M.

St. Louis, Aug. 9, 1891.

Sir: Consider me an applicant for the position advertised in to-day's Tribune. Am twenty-two years of age, have not handled dry goods, but am thoroughly conversant with the technical terms, abbreviations, and calculations pertaining to the business, having completed a commercial course at North-Western Business College, Naperville, Ills., the professors of which I am at liberty to use as parties of reference.

Respectfully,

E. B. BALDWIN.

Another Answer to an Advertisement.

A. M. BAKER & CO.,

Schuylkill, Pa., Oct. 7, 1891.

Lemont, N. Y.

Gentlemen:—In answer to your advertisement in the "Times" of to-day, for an assistant in your counting-house, I respectfully offer my services to your firm. I am without experience in business, but have a desire to enter mercantile life, am willing to work, and have just graduated from our city High School.

If you will give me a trial, I will devote myself to your interests and endeavor to acquit myself to your entire satisfaction. For reference as to my character or ability, I would offer the names of

Mr. GEORGE H. BANER, Fargo, Dak.

Mr. GEORGE F. DIEGEL, Cleveland, O.

Should a personal interview be desired, please address as above.

Very respectfully,

J. W. WILLIAMS.

Letter of Recommendation.

Warren, Oct. 7, 1891.

To whom it may concern:—The bearer of this, Mr. J. M. Horton, has been in our employ for three years past as salesman and book-keeper, and we have ever found him diligent and faithful in the discharge of his duties, and one who endeavored to make his employers' interest his own. He is correct and reliable in his accounts, and is well qualified to act as book-keeper or correspondent.

We cheerfully recommend him to any who may require the services of a trustworthy and competent person as accountant.

Very respectfully,

MARSHALL, FIELD & CO.

From a young man commencing business, to a Wholesale House,
with Order.

Racine, Wis., Aug. 15, 1891.

Messrs. WILLIARD, HATCH & CO.,

105 State Street, Chicago.

Dear Sirs:—Having recently commenced business for myself, with fair prospects of success, I shall be pleased to open an account with your house, and trust it will be to our mutual advantage. Should you think favorably of the matter, you will please fill the accompanying order with the least possible delay and on your best terms.

For testimonials, I refer you to J. R. Cramer & Co., of your city, by whom I have been, until lately, employed; but as this is my first transaction with your house, upon forwarding me an invoice of goods and deducting your usual discount for cash, I will remit a sight draft on the First National Bank of your city, for the amount, by return mail. Expecting prompt attention, I am,

Yours respectfully,

J. A. REUSS.

From a Boy applying for a Clerkship.

Chicago, Ills., Nov. 13, 1891.

187 Madison Street.

Messrs. A. S. KRIEBEL,

118 Madison Street, Chicago.

Dear Sir:—I notice in this morning's "Clarion" your advertisement of a boy wanted in a grain commission house; for which position I take the first opportunity to apply. I am fourteen years old, have been at school the most of the time, winters, for the past seven years, and understand book-keeping and conducting correspondence pretty well, having assisted my father much of the time while he was in the coal trade, which was about three years.

I am perfectly willing and ready to take my coat off and go right to work at handling grain or anything else in your line.

I refer you to Mr. George Beldon, Coal Dealer, at 65 State Street, Chicago, who has always known me.

I will board at home, and will try to earn for you Five Dollars a week.

Very respectfully, yours,

GEORGE ARNOLD.

Sending a Subscription to a Newspaper.

Warren, Warren Co., Pa., May 4, 1891.

To the Publishers of "COLLEGE CHRONICLE,"

Naperville, Ills.

Gentlemen:—You will find enclosed money order for One Dollar (\$1.00), for which you will please send to my address a copy of "The College Chronicle" for one year, beginning with the first number of the present volume.

Yours respectfully,

F. D. VINCENT.

Advising Receipt of Invoice.

Louisville, Ky., May 21, 1891.

Mr. JAMES L. KING,

Boston.

Dear Sir:—Your favor of March 29th, with Invoice, was received in due time. The goods are all that we desired; and for your promptness and care in filling our order, accept our thanks.

Enclosed find in payment Walker & Bros., Draft on First National Bank of Boston, at sight, for \$1950.25. Please acknowledge receipt per return mail, and oblige

Yours respectfully,

J. L. JONES & CO.

Sending Draft.

Naperville, Ills., March 11, 1891.

Messrs. S. A. MAXWELL & CO.,

134-136 Wabash Ave.,

Chicago, Ills.

Gentlemen:—Inclosed please find draft on Willard Scott & Co., Bankers, No. 12945, for \$89.77, in payment of Bill for Stationery, dated March 5, 1891.

Please acknowledge receipt, and oblige,

Yours respectfully,

J. LERCH.

Sending Receipt.

Naperville, Ills., Dec. 1, 1891,

Mr. ISRAEL GROSS,

Marion, Marion Co., Kans.

Dear Sir:—Your favor of Nov. 29, 1891, just received. Inclosed please find receipt. With thanks for your prompt remittance,

I am very respectfully yours.

J. LERCH.

Enclosing Note for Discount.

Annapolis, Jan. 14, 1891.

CHAS. W. WARD, Esq., Cashier.

Dear Sir:— We offer for discount, enclosed, L. Brown's note, Dec. 20th, at ninety days, for \$4,250.75. By discounting the same you will greatly oblige.

Yours respectfully,

C. E. SELBY & CO.

Ordering Books.

Naperville, Ills., Oct. 9, 1891.

Messrs. DOMBY & SON,
45 State Street,
Chicago.

Gentlemen:— Please send me, by American Express, as soon as convenient, the following books:

Clark's Commercial Law,	- - - - -	\$1.00
Longfellow's Poems,	- - - - -	2.00
Westlake's Practice Words,	- - - - -	.60
White's Arithmetic,	- - - - -	.80

When forwarded please notify me by letter the discount that I am entitled to, on the above books.

Very respectfully yours,

ADOLPH MEYER.

Requesting Settlement of Account.

Nashville, Tenn., Nov. 10, 1891.

EUGENE BURNS, Esq.,
Memphis, Tenn.

Sir:— I enclose your account. I shall feel obliged by your settlement at an early date, as I have several heavy payments to make. Trusting that you will excuse my troubling you, I am, respectfully,

WILLIAM GREEN.

Order for a Book.

Trenton, N. J., Nov. 6, 1891.

Messrs. JAY & MORRISON,
Poughkeepsie, N. Y.

Gentlemen:— Enclosed find Two Dollars (\$2.00), for which please send me two copies of "The Business Guide," and oblige,

Yours truly,

J. G. WOLF.

Acknowledging Remittance.

New York, Oct. 12, 1891.

Received from Messrs. W. D. Wolf & Co., Five Hundred and Fifty ²⁵/₁₀₀ Dollars on account.

550. ²⁵/₁₀₀

H. D. SCHMUTZ & CO.

Asking a Loan.

Reading, Pa., May 28, 1891.

Dear Sir:— I write to ask you a rather disagreeable favor. A disappointment in the receipt of some money due has exposed me to a temporary embarrassment. Would you under these annoying circumstances accommodate me with a loan of Twenty Dollars until pay-day, when I shall be able to return it without fail.

It vexes me much to ask a friend such a thing, but you will, I hope, excuse it on the part of

Yours, most truly,

F. D. VINCENT.

To Mr. William Williamson,
Mendota, Ills.

Requesting Payment.

Buffalo, July 20, 1891.

Mr. M. B. FOSTER,
Yankton.

Dear Sir:— If convenient, please let us have the amount of your bill, March 15th, for \$225.50. We desire to close all our accounts by the 30th inst., and have need of all the funds due us. Please remit without delay, and much oblige,

Yours respectfully,

MILLER, JOHNSON & CO.

Requesting the Payment of a sum of Money.

Naperville, Ills., May 15, 1891.

H. M. SCHREFFER, Esq.,
Howell, Mich.

Dear Sir:— Although the balance of the account between us has been of long standing in my favor, yet I would not have applied to you at present, had not a very unexpected demand been made upon me for a considerable sum, which without your assistance, it will not be in my power to answer. When I have an opportunity of seeing you, I shall then inform you of the nature of this demand, and the necessity of my discharging it.

I hope you will excuse me this freedom, which nothing but a regard to my credit and family could oblige me to take. If it does not suit you to remit the whole, part will be thankfully received by

Your obedient servant,

D. E. HOOVER.

Urging Payment of Rent.

Peoria, Ills., Oct. 16, 1891.

Mr. D. P. COYL,
Troy, N. Y.

Dear Sir:— I have waited patiently for your convenience in the payment of the rent for the house you are at present occupying. As, however, you have now been my tenant for four months without meeting any of the payments, which were to be made monthly, I feel obliged to remind you of the fact that there are now \$80 due me.

Trusting that you will give the subject your immediate attention, I am,

Yours truly,

JAMES FOX.

Application for a School.

San Jose, Cal., Oct. 16, 1891.

JAMES MILLER, Esq.,
Secretary of School-Board,
Cincinnati.

Sir:— Having learned that there is a vacancy in your school, I beg leave to offer myself as a candidate for the position.

I graduated at the North Western College in 1889, and have since devoted myself to the work of teaching.

Enclosed you will find testimonials from J. K. Rassweiler, Esq., County Superintendent, and President Smith, former president of the above named institution; and I am also permitted to refer to Rev. T. Woodside and Hon. Tho's Brown of this city.

Should a personal interview be desired, I shall be glad to present myself at such time and place as may be most convenient to yourself.

I am, Sir, with much respect,

Your obedient servant,

WM. REINKE.

Order to a Store for Goods.

At Home, Feb. 10, 1891.

Mr. Counter :

Please deliver to the bearer, for me:

22 lbs. Dried Apples,

5 lbs. Best Rice,

\$1.00 worth of A Coffee Sugar,

1 bar Rising Sun Stove Polish.

Charge the same to my account, and greatly oblige,

MRS. J. G. FARMER.

Ordering a Bill of Goods.

Adrian, Mich., Jan. 25, 1891.

Messrs. L. E. Fiant & Co.,

414 State Street, Chicago.

Gentlemen:—Please ship me at your earliest convenience, by Freight, per C., B. & Q. R. R., the following:

34 brls. Mess Pork,

20 brls. Coffee Sugar,

7 chests Japan Tea,

10 bags Rio Coffee,

3 mats Cinnamon.

Hoping to receive the above order of goods in good condition and without unnecessary delay, I am,

Yours truly,

F. J. TAGGART.

Recommendation for a Farm Laborer.

Sycamore, Ill., Nov. 1, 1890.

To whom it may concern:—

This certifies that the bearer, Jno. Jones, has worked for me during the last season upon my farm, and that I have found him steady, reliable, strong and a good workman. I recommend him to any one who wishes help that understands farming, as one who is able and willing to earn good wages.

LEE SCHAEFFER.

Letter of Introduction.

SHORT FORM.

Dear Friend:—I have the pleasure of introducing to your acquaintance Mr. W. N. Tarnutzer, whom I commend to your kind attention.

Very respectfully yours,

S. REIK.

To Rev. J. Miller,
Naperville, Ill.

Letter of Congratulation.

Naperville, Ill., Jan. 27, 1891.

My Dear Friend James:

Allow me to congratulate you on your marriage, of which I have just heard. With all my heart I wish you a long, happy and prosperous life with your helpmeet. May you share with each other many joys and few sorrows.

As ever your friend,

To J. A. Schneider,

EMIL VON BERGEN.

Batavia, Ill.

Letter of Condolence.

Reese, Mich., Jan. 7, 1891.

Dear Friend Clayton:

With feelings of deepest sorrow I have learned of your recent heavy loss. You have my sincere sympathy in this your affliction. With hope that you may speedily retrieve your loss, I am, as ever,

Your friend,

To S. H. Wolf,

R. R. BARNARD.

Naperville, Ill.

Letter of Credit.

Naperville, Ills., Feb. 4, 1891.

Messrs. Steiner & Leffler,

New York.

Dear Sirs:—Please allow Mr.

J. A. West a credit for such goods as he may select to an amount not exceeding Eight Hundred Dollars (800.00) for four months. I will become responsible for the payment of the same should Mr. West fail to meet the obligation promptly.

Please inform me of the amount for which you give credit, and in default of payment notify me promptly.

Very truly yours,

I. J. HOUPTFUEHRER.

(Mr. West's signature,
J. A. WEST.)

NOTE.—Letters of credit are of great benefit to persons traveling in foreign lands. It enables them to draw money from banks and brokers, and thereby avoid the risk of carrying large amounts of money about their person, and the annoyance of making frequent exchanges.



HOW TO APPLY FOR A SITUATION.

1. Fit yourself by securing a fair knowledge of Arithmetic, Geography, Grammar, United States History, Book-keeping, and master Penmanship sufficiently so as to write neatly and rapidly. Obtain a good commercial education in some reliable institution if you possibly can.

2. Secure a few letters of recommendation from your friends and prominent business men if possible.

3. Make up your mind what business you desire to follow and get a list of the best houses in this line, and then make preparation to apply.

4. Then put on your best clothes, see that they are neatly brushed, that your linen is faultless, your boots blacked, your hands and face clean, and your finger-nails properly trimmed.

5. Go to the best houses first. Walk directly to the office and ask for the proprietor. If he is not in or, is busy and cannot see you, say that you may call again and politely leave. Make a note of your call and then go to the next place on your list.

6. If you succeed in seeing the proprietor and are permitted to state your case, come to the point at once. Say that you are from Illinois (or whatever State you are from), and that you have been in the city for so many days, or weeks, as the case may be, trying to learn some things that may enable you to be helpful in a business house, and that you desire to try, wages no object; you are willing to demonstrate your fitness at whatever work they may have, no matter what it is.

7. If you are fortunate enough to gain the proprietor's confidence, so that he is willing to try you, be glad and ask him to give you any work he may have. If he has no work he will say so, and you bid him good-day and politely retire.

8. Before you go to the next place stop for a moment and consider first, that you made no failure in not securing a position, for the reason that it did not exist, and study carefully and see if you have not made any mistakes in your method of application.

9. Enter the next house with as much courage and confidence as you would if you were sure of a favorable reply. Adopt the same course as before, and if unsuccessful, remember that you and God hold the secret, and keep on in the same way. If in a large city, visit forty or fifty houses each day. Pluck and perseverance will win you a position, for many of our most prominent business men of to-day began by working long and hard in securing their first situation in the same way.

10. Remember that most of the prominent business men of to-day worked their own way up from the bottom, and they will have considerable sympathy for a young man who is starting out in life with nothing but an honest heart and willing hands.



If the parties are very intimate friends, the formal and ceremonious style may be dropped, and that of a familiar letter adopted, as in the following :—

Saturday Morning, May 10.

Dear Fanny,

We are going to Irving's Cliff this afternoon for wild flowers. Will you oblige us by making one of our little party? If so, we will call for you at two o'clock. Do go.

Yours affectionately,

Libbie.

Please answer by bearer.

My dear Sir,

If you can come next Sunday we shall be equally glad to see you, but do not trust to any of Martin's appointments in future. Leg of lamb as before, at half-past four, and the heart of Lamb for ever.

Yours truly,

C. Lamb.

30th March, 1821.



LADIES' DEPARTMENT.

A LADIES' LETTER WRITER.

New and Practical Rules for Ladies' Correspondence.

1. Letter writing is a department of literature in which ladies have borne the palm.

2. Young ladies should remember that a good letter, well written, well spelled, and well arranged, is always admired, no matter who the writer may be. Ability to write an intelligent letter is absolutely necessary to even only a fair culture.

3. A poorly written epistle is always criticised and is never satisfactory, no matter what the contents may be.

4. Young ladies lose many opportunities to improve their spelling and grammar by neglecting the art of careful and prudent letter writing. A spicy, bright letter brings sunshine to both the writer and the reader.

5. Never mail a letter if you are in anywise ashamed of it on reading it over. Tear it up and try it again. A thoroughly good letter always makes the reader wish there was more of it. The polished style cannot be acquired without toilsome attention previously given to the details. First be correct in spelling, punctuation, capitals, paragraphs, and grammar; it is safe to say that there are none who cannot do this. Then add to this ability, the thinking and the feeling power, and you will not only be able to write letters, but will begin to delight in literature.

6. Never flatter; be especially chary of compliments when writing to gentlemen; in all your converse let the title of sycophant be won by the man. Always say what you desire to say in a clear straight-forward way.

7. Write as you would talk. If you feel puzzled when you sit down to write as to what to say or how to say it, it is simply an indication that you need practice in writing. Select a few friends with whom you are in familiar terms; open up a correspondence with them, and after a few months of study and practice, you will find letter writing a pleasure instead of a task.

8. A well written letter has opened the way for usefulness to many a one, has led to many a happy, constant friendship, and has proved a life-long help.

9. Letter Writers are of little benefit unless it be to give a general idea of form, such as opening and closing, etc. People

must write letters out of their own heads, and it is impossible to secure them manufactured or ready made. A good letter must have head and heart in it. A copy cannot have the heart element; it is purely frigid. Besides, none but the illiterate would think for a moment of copying. Resolve, then, to be accomplished in writing. The practice of writing sentences on bits of paper, expressing your thoughts in different language, is an excellent exercise in the cultivation of this talent.

10. Thinking over the different subjects of which you desire to speak in your letter and arranging them in natural order is good practice. After selecting as many subjects as you desire to mention in you letter, write them carefully in a series of paragraphs in proper sequence, and you will find that your letter will be complete and interesting. Think your heart full and send it out through your pen.

11. When you desire to begin a letter to your friend, just consider what you would say if he or she were present, and the moment you have abstracted yourself the first words of greeting will pass through your mind, and then the inquiries will naturally follow. If you will cultivate the habit of tracing your thoughts when you begin you will soon have a natural, easy, and pleasant epistle for your correspondent to read.

12. A fitting caution is: Remember that it is possible for anything and everything written to find its way into print.



Asking for a Letter of Recommendation.

Lemont, Illinois.

Will Mr. Hughes be so good as to favor me with a line, stating in what manner and with what success I discharged my duties while serving as a teacher in the school in which he is director. Such a testimonial, if as favorable as I have reason to expect, may be of great benefit to me in procuring a desirable situation as teacher.

Hoping that Mr. Hughes will favor me with a reply as soon as convenient, I remain
his friend,

Lulu Brown.

To Larry Hughes, Esq.

A Letter of Condolence on a Child's Death.

Houston, Texas, June 10, 1891.

My Dear Friend:—If anything could have caused me especial pain, it was the news of your sad bereavement. How I remember your dear child! Lovely, lively, intelligent, and affectionate, ever displaying a thoughtfulness beyond her years, and to lose such a promising child truly brings a deep and heavy shadow; but remember that light sometime will break through, and there will be a glad and happy reunion in the great beyond.

It has, indeed, been a heavy blow, and I scarcely know how to talk of consolation under so bitter an affliction. But think of One who careth for us all and who loves little children. He has prepared a bright and beautiful home beyond the grave, and the spirit of the dear child will only wait a brief period when in sweetness and in love she will meet her mother and father to depart no more.

I can say no more; human consolation is weak. May God bless you in your hour of sorrow, is the wish of

Your loving friend,

M. Carrie Kettler.

To Mrs. Henry Craver.

Requests the Address of a Paper Changed.

Jersey City, N. J., June 23, 1891.

"Ladies' Home Journal,"

Philadelphia, Pa.

Gentlemen:—Please change the address of the "Ladies' Home Journal," from Mrs. Gertrude G. Goodrich, Naperville, Ills., to Mrs. Gertrude G. Goodrich, 45 Merrimac St., Tacoma, Washington, and oblige,

Yours very respectfully,

Mrs. Gertrude G. Goodrich.



A Letter to a Lady Friend.

Vicksburg, Miss., June 23, 1891.

Miss Nellie Reynolds,

Scotland, Conn.

Dear Friend :—It no doubt will be a great surprise to you to receive a letter from a distant friend who has been silent so long. I will venture to try to experiment, hoping you will recover from the shock in season to make an early reply.

How has the world prospered you all these long years since we last met? I hope you are in the full enjoyment of the blessings of good health and find many interesting and profitable enterprises to engage your time and attention.

Where and how are all the good people who used to be our neighbors? Scattered, no doubt, some to distant States, and some to the silent abodes of the village burial ground.

And thus, Nellie, does time make its mark, and it writes upon all living the sad, sad words, Passing away.

But I said I would be brief. Please write to me, and tell me all the items of interest. With many kind thoughts, I remain, as ever,

Truly your friend,

J. O. Everett.

Dr. Franklin to His Wife.

"Easton, Nov. 13, 1756.

"My Dear Child :

"I wrote you a few days since, by a special messenger and inclosed letters for all our wives and sweet-hearts, expecting to hear from you by his return, and to have the northern newspapers and English letters per the packet; but he is just now returned without a scrap for poor us; so I had a good mind not to write to you by this opportunity, but I never can be ill-natured enough, even when there is the most occasion. The messenger says he left the letters at your house, and saw you afterwards at Mr. Duche's and told you when he would go, and that he lodged at Honey's, next door to you, and yet you did not write; so let Goody Smith give me more judgment, and say what should be done to you. I think I won't tell you that we are all well, now that we expect to return about the middle of the week, nor will I send you a word of news—that's poz.

"My duty to mother, love to children, and to Miss Betsy and Gracy, etc., etc.

I am your loving husband,

B. Franklin.

"P. S. I have scratched out the loving words, being written in haste by mistake, when I forgot I was angry."

Burn's Idea of a Good Wife.

(ROBERT BURNS TO MRS. DUNLOP.)

The most placid good nature and sweetness of disposition; a warm heart gratefully devoted with all its powers to love me; vigorous health, and sprightly cheerfulness, set off to the best advantage by a more than commonly handsome figure; these, I think, in a woman, may make a good wife, though she should never have read a page but the Scriptures of the Old and New Testaments, nor have danced in a brighter assembly than a penny-pay wedding.



HOW TO WRITE NOTES OF INVITATION.

Notes of invitation differ from ordinary letters in the following ways: 1. More formal; 2. Wholly or partly written in the third person; 3. Date is generally written at the bottom; 4. They are without signature.

2. Materials—The paper and envelopes used should be of the finest quality.

3. A dinner invitation should be answered immediately, others (if answered at all) not later than the third day.

4. Regrets—It is more friendly and courteous to state a reason for non-attendance, than to decline without any assigned cause.

After having accepted an invitation, never absent yourself without the *strongest reasons*.

BIRTH-DAY CELEBRATION.

Mr. and Mrs. H. A. Matthews request the honor of J. A. Austin's company to celebrate their son's majority, on Wednesday evening, June tenth, 1891.

1402 Arch St.

*R. S. V. P.**

TO MEET VISITING FRIENDS.

Mr. and Mrs. C. W. George request the pleasure of W. N. Tarnutzer's company, on Friday evening, November 19th, from eight to eleven o'clock, to meet W. A. Womer.

Broad and Walnut Sts., Philadelphia.

EXCURSION.

Mr. Smith would be pleased to have your company on Thursday, Sept. 15th, to visit the park.

Carriages will be in waiting at the Continental Hotel at 4 o'clock P. M.

Continental Hotel. R. S. V. P.

Mr. Taylor solicits the honor of attending Miss Adams to the opera on Thursday evening next.

Tuesday, Nov. 3.

The bearer will wait for the answer.

* R. S. V. P. French, "Answer if you please."



Mr. Walter Hood presents his regards to Miss Jennie Mason, and requests the pleasure of escorting her to the Grand Opera, to-morrow evening.

246 Monroe Ave., April 10,

—ACCEPTANCE.—

Miss Jennie Mason presents her compliments to Mr. Hood, and accepts with pleasure his kind invitation to accompany him to the Opera.

April 11th

Invitation to Spend the Evening.

Mrs. M. Bell requests the pleasure of Mr. and Mrs. Howard Wilson's company, on Thursday evening, March 30th, at seven o'clock.

Kaperville, Ill.

Acceptance.

Mr. and Mrs. Howard Wilson have much pleasure in accepting Mrs. Bell's kind invitation for Thursday evening, March 30th.

*Mill Avenue,
Thursday, March 19th.*

Regret.

Mr. and Mrs. Wilson regret that, owing to previous engagements, they are unable to accept Mrs. Bell's kind invitation for Thursday evening, the 30th instant.

*Mill Avenue,
Tuesday, March 19th.*



HOW TO WRITE BUSINESS AND VISITING CARDS.

USES.—1. To serve as credentials, or certificates of authority when an indorsement or an introduction is written upon it.

2.—To make known one's name to a stranger.

3.—To announce a visitor's name when making a call.

4.—Business cards are used by business men to show their kind and place of business.

TITLES.—Social titles are *Mr.*, *Mrs.* and *Miss*. A man and his wife sometimes use a joint card, written *Mr. and Mrs. A. S. Barnard*. A married woman living with her husband generally uses her husband's name instead of her own, as *Mrs. Rev. J. C. Myers*. Mother and daughter when visiting together often use the same card (the daughter's name is placed below her mother's name). When two or more daughters are in society, the card of the eldest is written *Miss Barnard*, those of the others *Miss Libbie Barnard*, *Miss Rose Barnard*, etc. Clergymen, physicians and dentists use their professional titles instead of *Mr.*

Business Cards should contain in as few words as possible the leading features of the business which you desire to advertise.

E. D. Davis, M. D.

Ottawa,

58 Main St. Ills.

Miss Barnard.

Mrs. S. A. Ballou,
The Misses Ballou,
44 Washington St.

Dr. & Mrs. A. A. Miller.

The Misses Stirling,
120 Holland Ave.



"In the midst of life there is death."

HOW TO WRITE RESOLUTIONS

On the Death of Members of Societies or Prominent Citizens.

1. Resolutions of societies, clubs, or any organization on the death of a member should always be deliberate, concise and consistent.
2. Great care should be taken that they are not too brief nor too long, and be careful to avoid excessive exaggerations.
3. Resolutions in form are always prefaced with a preamble which should specify the occasion of what shall follow. The preamble should begin with "whereas," and each resolution should begin with "resolved" or "be it resolved."
4. When resolutions have been framed by a committee, all their signatures should be annexed to the resolutions.

FORM OF RESOLUTIONS.

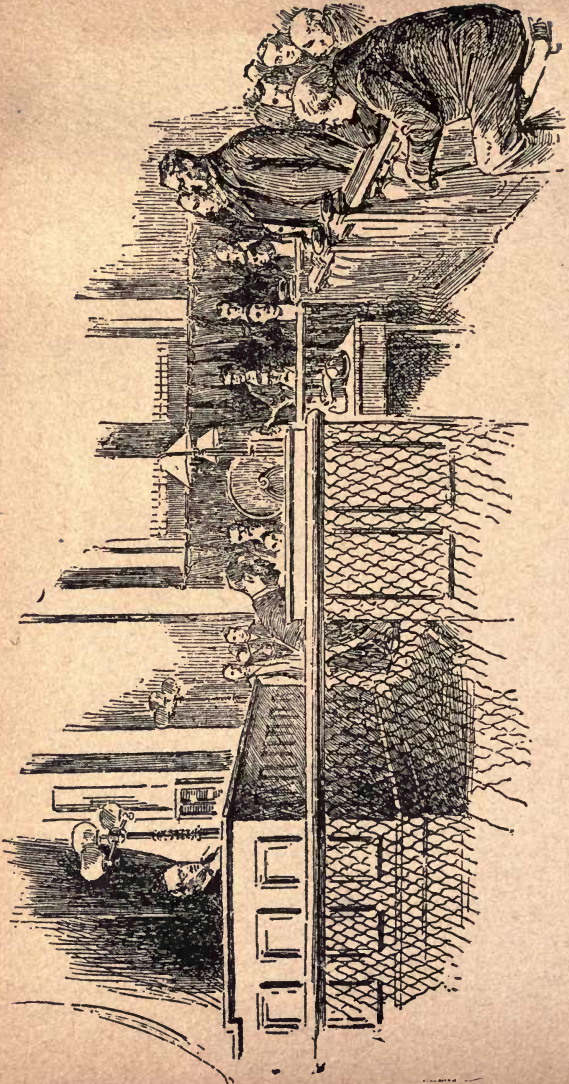
WHEREAS, The great and supreme Ruler of the universe has in his infinite wisdom removed from among us, one of our worthy and esteemed fellow-laborers Henry A. Harlow; and whereas, the long and intimate relation held with him in the faithful discharge of his duties in this society makes it eminently befitting that we record our appreciation of him; therefore,

Resolved, That the wisdom and ability which he has exercised in the aid of our organization by service, contributions, and counsel, will be held in grateful remembrance;

Resolved, That the sudden removal of such a life from among our midst leaves a vacancy and a shadow that will be deeply realized by all the members and friends of this organization, and will prove a serious loss to the community and the public.

Resolved, That with deep sympathy with the bereaved relatives of the deceased we express our hope; that even so great a loss to us all may be overruled for good by Him who doeth all things well;

Resolved, That a copy of these resolutions be spread upon the records of this organization, a copy printed in the local paper and a copy forwarded to the bereaved family.



THE COURT ROOM.

SAFE PRINCIPLES TO PRACTICE.

1. **Buying Past Due Notes.**—Don't make a practice of buying past due notes, especially those not secured by mortgage. There are exceptions, however, where it is right and proper. But the shrewd business man seldom touches a past due note.

2. **Selling Notes without Recourse.**—If you sell a note drawn payable to your order, it will be necessary for you to write your name upon the back, in order that it may be legally transferred. With the name thus upon the back, you must consider yourself responsible for the payment of the note, in case the maker fails to pay. But if you sell the note with the distinct understanding that you are to be relieved of further responsibility, then you should write on the back, over your signature, these words: "Without recourse."

3. **Keeping Cancelled Notes.**—If parties are holding notes against you that are secured by mortgage, it would be well to cancel them, or mark them paid as soon as they are taken up, but not to destroy them. Keep every note until the last one has been paid and the mortgage discharged. This is quite important.

4. **Inquiring for Notes at Bank.**—When calling at a bank for your note, always mention the exact day on which it falls due; if the paper belongs to another party, and is held by the bank for collection, then mention also the name of the person to whom it was originally given; if you have received a written notice concerning the note, take this notice with you, for it will tell the whole story. Banks keep their own notes in one place, and those of their customers in another; they also keep each date by itself and can, therefore, find notes more readily, if owner's names and date of maturity are given.

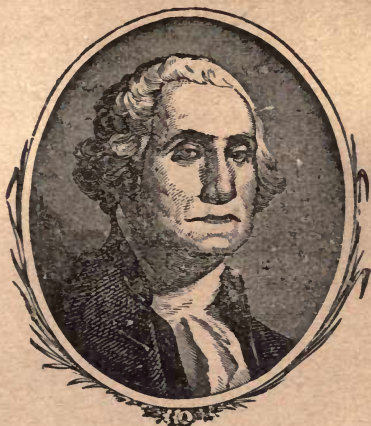
5. **Getting Consent of Surety.**—If you hold a note against a certain party and it is signed by someone else as surety, be very careful when that note becomes due not to consent to an extension of time, unless the person who has signed it as surety gives his consent in writing. In the State of Illinois it does not make any difference, but in some States it does, and in order to be on the safe side it is better not to agree to an extension of time unless the surety gives his consent in writing. When it is necessary to extend the time, it is better to write a new note, and have both parties sign it.

6. **Caution as to Endorsements.**—When making a payment of interest or principal upon your note, see that it is properly endorsed yourself, and examine the note and see that it is your note. It is not unusual that an endorsement is made upon the wrong paper.

7. **Receipts for Payment of Interest or Principal on Notes.**—The practice of taking interest or part payment of principal without having them endorsed upon notes is a very poor one, although it often happens that it is necessary. Honest men sometimes receive money in that way but neglect to make endorsement, and should the note pass in the hands of an innocent person who knows nothing about these payments, he can insist upon the payment of the face of note and interest. All payments of principal and interest must appear as endorsements upon the back of the note.

8. **Payment of Notes at a Distance.**—In the payment of notes where parties live at a distance, request them to send it to the nearest bank for collection. Then you can go there and make payment and receive the note. This is the only safe and business-like way to pay a note where party holding it lives at a distance.





GEORGE WASHINGTON.

Washington studied and mastered without help the intricate forms of business. He copied bills of exchange, notes, drafts, bills of sale, receipts, and all the varieties of business forms with a precision and elegance that were remarkable. — Irving.

HOW TO WRITE, COLLECT, AND TRANSFER NOTES.

1. Notes are very common, and of great utility in business. At the present time a large proportion of all the business is transacted on credit, that is, a tradesman instead of paying for his stock when he buys it, promises to pay at some future time; that promise, whether oral or written, is itself property, and may be transferred from one to another. Hence notes which are a written and unconditional admission and evidence of a debt, facilitate the use of credit, which is and has been a great factor in the extension of commerce and trade.

2. A note is a simple written promise to pay a certain sum at a certain time, or on demand, or at sight to a person therein named.

The person who promises is called the *maker*, and the one to whom he promises is called the *payee*.

3. Notes are made payable to bearer or to order.
4. A note payable at a future time is not due until three days after the specified day of payment.
5. Paper payable to bearer is transferred by delivery, payable to order by indorsement.
6. A note made by an intoxicated person, or minor, is void.
7. A note negotiable must contain five things: (1) that the date of payment be certain to come; (2) that it have one of the two words *order* or *bearer*; (3) that the amount be specified and certain; (4) that it be payable in money only; (5) that it be an unconditional promise.
8. A signature written with a lead pencil is valid.
9. If no time is specified, the note is payable on demand.
10. All the parties who have written their names on a note are liable for the amount due; but only one satisfaction can be recovered.
11. An indorser can avoid liability by writing "without recourse" on the back of the note with his signature.
12. A promissory note does not bear interest until after maturity, unless so specified.
13. To make the indorser of a note responsible, the note must be presented and payment demanded of the maker on the very day when it becomes due. If payment is refused, notice must be given immediately to the indorser or indorsers.
14. A note given by one who cannot write should be witnessed.
15. A note destroyed by fire can be collected by sufficient proof.
16. Fraudulently making or altering a written instrument is forgery.
17. A forged instrument is not commercial paper, and one whose name is forged cannot be made responsible.
18. A note obtained through fraud, in the hands of an innocent party who has acquired it in good faith, may be collected.
19. Notes are not transferable after they are due.
20. Always write the name of the place and State. It is just as important as the date.

21. Negotiable paper, payable to bearer, or indorsed in blank, which has been stolen or lost, cannot be collected by the thief or finder, but a holder who receives it in good faith before maturity for value, can hold it against the owner's claims.

22. Money paid under mistake must be refunded.

23. A note made in one State, payable in another, must be governed by the laws of that State in which it is to be paid.

24. Demand for payment of a note must be made upon the last day of grace; if that day is a Sabbath or a holiday, demand must be made on the day previous.

25. One who receives a note knowing it to have defects, gets no better right to collect it, than the one from whom he received it had.

26. If a person at the time of taking a note, has notice that it is void through fraud, or upon any legal grounds, he cannot collect it.

27. A note as a gift is void for want of a consideration.

28. Upon presentment for payment and refusal by maker at maturity, the note should be protested by a Notary Public.

29. An extension of the time of a note by holder, releases sureties and indorsers.

30. The signature on a note or bill need not be proven, unless it is first denied under oath.

31. When several persons unite in a note and say: "*we promise*," or "*we jointly promise*," it is a joint liability only, and all must be sued; but if they say *we* or *either of us promise*, or "*we jointly and severally promise*," the liability is both joint and several, and either or all may be sued.

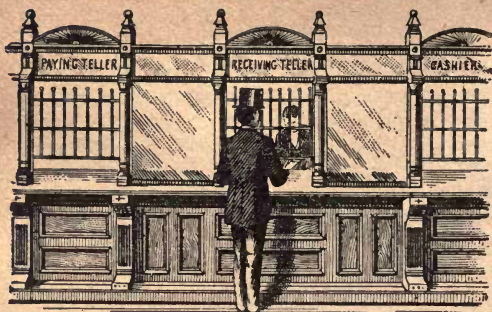
32. When a note says "*I promise*," but is signed by two or more, each signer is bound for the whole amount, and each or all may be sued.

33. If the words *order* or *bearer* are omitted, the note is not transferable.

34. A note given by one who is not of age cannot be collected by law. If the minor ratifies after becoming of age, it becomes valid.

35. The words "value received" are not required by law, and can be safely omitted. The law always presumes value was received until evidence is shown to the contrary.

36. Days of Grace are not allowed in California, Arizona, Idaho and Oregon.



How to Discount a Note at the Bank.

1. **DISCOUNT** is a certain percentage deducted from a note or debt for the payment of same before it is due.

2. **BANK DISCOUNT** is simple interest on the principal, taken in advance, and is usually reckoned for *three days* more than the specified time.

3. In discounting a note which is drawing interest, the discount must be reckoned on the amount or value of the note when due. (The interest for the full time must be first added to the face of the note before computing the discount.)

Example.—Robert F. May, on May 2d, offered the following note, properly indorsed, for discount:—

\$525.

PHILADELPHIA, MARCH 29, 1893.

Sixty days after date, we promise to pay to Robert F. May, or order, at the Union National Bank, Five Hundred and Twenty-Five Dollars, without defalcation. Value received.

R. J. BIRNEY & Co.

How much will he receive as the net proceeds of the above note?

Sixty days from March 29th is May 28th, which, with the three days of grace added, gives May 31st. From May 2d to May 31st, including the day of discount, is 30 days.

Interest on \$525 for 30 days = 2.63 discount.
 $525 - 2.63 = 522.37$ net proceeds.

How to Discount Bills and Invoices.

First deduct the trade or general discount from the amount of the bill, and from this remainder subtract the discount for cash.

Example: What must be paid for a bill of goods amounting to \$200, with a discount of 25% and 10% off?

Solution: $\$200 \times 25\% = \50.00 trade discount.
 $\$200 - 50 = \$150.$
 $\$150 \times 10\% = \15.00 discount for cash.
 $\$150 - \$15 = \$135. = \text{Ans.}$

\$15²⁵/₁₀₀.

Chicago, Ill., July 10, 1889.

Seven months after date I
promise to pay Carmon & Smith
Fifteen and ²⁵/₁₀₀ Dollars, with interest
at six percent. Value received.

J. L. Nichols & Co



The Safe Way to Write All the Different Forms of Notes.

\$375.00.

Naperville, Ills., Oct. 7, 1892.

One year after date I promise to pay to J. L. Nichols, or order, Three Hundred and Seventy-five Dollars, for value received, with interest at six per cent.

J. R. Price.

Payable at Bank.

\$140.00.

Naperville, Ills., Oct. 10, 1891.

Two years after date, for value received, I promise to pay N. A. Lundy, or order, Four Hundred and Forty Dollars at Second National Bank. Interest at eight per cent. per annum.

P. D. Crimmins.

A Note by One who Cannot Write.

\$49.50.

Cleveland, Ohio, Mar. 20, 1892.

One year after date, I promise to pay D. A. Pftzinger, or order, Forty-nine $\frac{50}{100}$ Dollars, with interest at eight per cent. Value received.

his
John + Rourke,
mark.

Michael Curtis, Witness.

N. B.—A note made by a person who cannot write should always be witnessed by a disinterested person.

On Demand.

\$25.67.

Toronto, Ont., Oct. 12, 1891.

On demand I promise to pay to the order of J. D. Jones, Twenty-five $\frac{67}{100}$ Dollars. Value received, with interest at six per cent.

J. P. Reynolds.

NOTE.—This note answers the same purpose as a note written one day after date.

My Own Order.

\$200.00.

Ottawa, Ont., July 20, 1892.

For value received, I promise to pay, sixty days after date, to my own order, Two Hundred Dollars, with interest at eight per cent.

A. S. Barnard.

NOTE.—A note may be drawn to the maker's own order, with his indorsement in favor of the creditor. This note then can be transferred without indorsement.

Joint Note.

\$200.

Lisle, Ills., Jan. 1, 1891.

One year from date, we promise to pay P. D. Crimmins, or order, Two Hundred Dollars. Value received. Interest at six per cent.

Edward Strohm.

Chas. Schwartz.

Principal and Surety Note.

\$600.

Montreal, Sept. 21, 1892.

For value received, on or before July 27, 1893, I promise to pay to the order of Grover Cleveland, Six Hundred Dollars. Interest at nine per cent.

Peter Thompson, *Principal*.Jasper Dille, *Surety*.

NOTE.—The general form of a Principal and Surety is for the principal to properly sign the note, and the surety to indorse it.

Collateral Note.

\$500.

Mendota, Texas, Sept. 25, 1892.

Sixty days after date I promise to pay to the order of Elmer Wicks, Five Hundred Dollars, without defalcation, for value received. Interest at eight per cent.

Having deposited United States' Bonds of the nominal value of Six Hundred Dollars, which I authorize the holder of this Note, upon the non-performance of this promise at maturity, to sell, either at the Brokers' Board or at public or private sale, without demanding payment of this Note or the debt due thereon, and without further notice, and apply proceeds, or as much thereof as may be necessary to the payment of this Note, and all necessary expenses and charges, holding myself responsible for any deficiency.

Philo Barber.

Accommodation Note.

\$500.00.

Meriden, Vt., March 13, 1892.

Sixty days after date I promise to pay to the order of Frank Bryant, Five Hundred Dollars, at the Earlville National Bank, without defalcation. Value received.

Henry Lundy.

Credit the drawer, }
Frank Bryant. }

NOTE.—An accommodation note is where a person gives his note to another person, who is by agreement permitted to take it to the bank and have it discounted. In the hands of the original holder it cannot be collected.

A Note by a Married Woman.

\$200.00.

San Francisco, Cal., June 15, 1892.

Two years after date, I promise to pay Fred. Lueben, or order, Two Hundred Dollars, with interest at eight per cent., payable annually. Value received.

Mrs. Mary Chandler.

N. B.—A married woman could formerly incur no liability, but now the statutes of the various States give her more or less freedom to enter into contracts, and consequently her note can be enforced against her. But in most States she cannot be bound by a note given to her husband, nor can he give a note to her. If she lends money to him and takes his note, a court of equity will oblige the husband to pay her, but the court of law will not.

Joint and Several Note.

\$2,000.00.

Ottawa, Ont., Nov. 25, 1892.

Ten months after date, we, or either of us, promise to pay Maggie Patterson Two Thousand Dollars, value received. Interest at five per cent.

E. C. Wicks.

John Lindsley.

Chattel Note.

\$700.

Earlville, Ills., Aug. 17, 1892.

Thirty days from date, for value received, I promise to pay A. B. Cody, or order, Seven Hundred Dollars in Warrenville Flour, at the then market rate, the same to be delivered at the option of the owner within the limits of the town of Earlville.

B. B. Boecker.

Produce Note.

\$37.00.

Memphis, Tenn., Nov. 20, 1892.

For value received, I promise to pay to Geo. Finkbinner, on demand, Thirty-seven Dollars, in goods at our store.

J. L. Strohm.

Judgment Note.

\$600.00.

Mt. Vernon, Ia., July 1, 1892.

One year after date I promise to pay H. M. Schrepfer, or order, Six Hundred Dollars at First National Bank, with interest at six per cent. per annum, after July 26, 1892, until paid.

And to secure the payment of said amount, I hereby authorize, irrevocably, any attorney of any Court of Record to appear for me in such Court, in term time or vacation, at any time hereafter, and confess a judgment without process in favor of the holder of this Note, for such amount as may appear to be unpaid thereon, together with the costs and twenty dollars attorney's fees, and to waive and release all errors which may intervene in any such proceedings, and consent to immediate execution upon such judgment, hereby ratifying and confirming all that the said attorney may do by virtue thereof.

S. H. Streyffeler.

A Corporation Note.

\$200.00.

Augusta, Me., Mar. 18, 1892.

Nine months after date, the Granite Stone Company promises to pay J. D. Huling, or order, Two Hundred Dollars, with interest at seven per cent. Value received.

Naperville Stone Company.

Attest: I. K. Devitt, Secretary, T. P. Phillips, President.

N. B.—If corporation notes are drawn and signed in the above manner the officers are not personally liable.



How the Different Notes and Bills are Indorsed.

1.—Blank Indorsement.

A blank indorsement is writing the name of the holder on the back of the note. This, however, is not the best form of indorsement, and should rarely be used. Form 1 (page 124) is indorsed in blank as follows:

FORM A.

J. L. Nichols.

N. B.—This note is now transferable without further indorsement.

2.—Full Indorsement.

When the holder writes upon the back of the note, or bill, the name of the person to whom it is to be paid, and makes it payable to his order, and signs his name below, it is called a FULL INDORSEMENT.

Form 2 (page 124) is indorsed in full, and made payable to the order of J. A. West.

FORM B.

*Pay to the order
of J. A. West.
H. A. Lundy.*

N. B.—This note cannot be sold or transferred without Mr. West's indorsement.

3.—Qualified Indorsement, or How to Avoid Liability.

This is generally done by inserting the words "WITHOUT RECOURSE" in the indorsement. It relieves the indorser from all liability to pay, while at the same time it transfers the title perfectly to the one to whom it is sold.

FORM C.

Pay B. J.
Morton or
order, without
recourse.
J. D. Jones.

4.—Restrictive Indorsement.

A restrictive indorsement is intended to confine the payment to some particular person or purpose. Form 2 (page 124) is restrictively indorsed as follows:

FORM D.

Pay to J. A.
West only.
W. A. Lundy.

N. B.—This note cannot be transferred. The mere omission of the words "order" or "bearer" in an indorsement on the back of a note or draft does not have the same effect as the omissions of the same words in the face of the note or draft. If omitted on the face, it restricts negotiability.

5.—Conditional Indorsement.

Neither the original character of the note nor its negotiability is affected by a conditional indorsement. It only affects the title of the one to whom it is transferred.

FORM E.

Pay J. A. West,
or order, unless
I give you no-
tice not to pay
before maturity.
J. C. Kumes.

FORMS OF INDORSEMENTS.

1. Indorsement in Blank.

John S. Barton.

2. Indorsement in Full.

*Pay to Jas. Jones, or order.
John S. Barton.*

3. Qualified Indorsement.

*Without recourse.**John S. Barton.*

4. Restrictive Indorsements.

*Pay Robert Hunter, for my
use.**John S. Barton.**Pay to Chas. Harrison only.**John S. Barton.*

5. Conditional Indorsement.

*Pay George Gray, or order,
the within, unless before due
he receives the amount from
my agent.**John S. Barton.*

6. Indorsement by an Agent.

*John S. Barton,
Agent for Howard Chester.*

7. A Guaranty on a Note.

*For value received in cash,
I hereby guarantee the pay-
ment of the within note.**John S. Barton.*

1. The word *indorsement* signifies a writing on the back of a bill or written instrument.

2. The indorsement may be on any part of the note, or on a paper annexed to it, in ink or in pencil.

3. When note or bill is drawn payable to a person or his order, it is transferable only by his indorsement. Nothing else in law will hold the parties to a note directly liable to the holder.

4. When money is received on a bill or note, the amount and date of receiving should be plainly written on the back of the paper.

THE FORM OF A MONEY INDORSEMENT.

*Received on within note
Oct. 4, 1891,
Thirty Dollars (\$30.00).
Nov. 1, 1891,
Fifty Dollars (\$50.00).*

HOW TO WRITE, PRESENT, AND INDORSE A CHECK.

1. A check is a simple order on a bank for the immediate payment of a certain sum of money.

2. A bank can stamp a check good, or certify it, and thus become responsible to the holder for the amount.

3. In sending a check away from your own town or locality it should always be certified, as in the above.

4. A check is not due until presented. It is negotiable. It has no days of grace.

5. Giving a check is no payment of an indebtedness, unless the check is paid.

6. The death of the maker of the check before presentment to the bank, renders the check null and void.

7. A forged check paid by the bank is the bank's loss, and not the depositor's.

8. Payment of a check may be stopped by subsequent order to bank by maker before presentment of check.

9. The amount of the check should always be written out in words.

10. Every holder of a check is liable to a subsequent holder only for the time for which he would be held, if originally liable.

11. It is the safest rule always to act with diligence in presenting checks for payment.

12. Certificates of Deposit are used when money is deposited for a short time, and no regular bank account is kept. They can be used the same as a certified check.

13. In presenting a check to the bank for payment, always write your name on the back before presenting it.

14. If you have money in a bank and you wish to draw out a certain sum, write "Pay to myself," instead of writing your name in the body of the check, and then sign it.

15. A safe bank ought to be patronized, for it is dangerous to keep in possession or carry large sums of money.

All the Different Forms of Checks.

	STAMP.	No. 245.	Chicago, April 6, 1891.
	Naperville National Bank,		
	Pay to.....Hugh Graham, or Order,		
	One Thousand Dollars.		
	\$1000.	Good when properly indorsed. H. Wells, Teller.	J. A. West.

1. PAYABLE TO YOURSELF.

\$100.00. Lexington, Mo., Mar. 20, 1891.
Lexington National Bank, Pay to myself One Hundred Dollars.

W. D. Atkinson.

2. PAYABLE TO BEARER.

\$150.00. Naperville, Ills., Jan. 1, 1891.
First National Bank, Pay to J. L. Nichols, or bearer,
One Hundred Fifty Dollars.

Willard Scott & Co.

3. PAYABLE TO ORDER.

\$246.45. Earlville, Me., June 6, 1891.
Earl Exchange Bank, Pay to F. B. Smith, or order,
Two Hundred Forty $\frac{45}{100}$ Dollars.

O. M. Powers.

4. CERTIFICATE OF DEPOSIT.

\$225.00. Philadelphia, Nov. 12, 1890.
Keystone National Bank.

Thomas Hendricks has deposited in this Bank Two Hundred Twenty-Five Dollars, payable to the order of John A. Logan, on the return of this certificate properly indorsed.
C. E. Cramer, Cashier.

HOW TO WRITE ALL KINDS OF RECEIPTS.

A RECEIPT is an acknowledgment in writing that a certain sum of money or thing has been received by the party giving and signing the same.

A complete receipt requires the following statements : That a payment has been received; the date of the payment; the amount or article received; from whom received, and if for another, on whose behalf payment is made; to what debt or purpose it is to be applied; by whom received, and if for another, on whose behalf it was received.

2. If the giving and receiving of receipts was more strictly held to in the transactions of the various kinds of business, less trouble, fewer law-suits, and the saving of thousands of dollars would be the result.

3. If payment is made *upon account*, *upon a special debt*, or *in full*, it should be so stated in the receipt.

4. When an agent signs a receipt, he should sign his name, and then write his principal's name underneath.

5. It is not necessary to take a receipt on paying a note, draft, or other instrument indorsed by the payee, because the instrument itself becomes a receipt.

6. If a receipt is obtained through fraud, or given under error or mistake, it is void.



Receipt for the Purchase of a horse.

\$200.00.

Omaha, Neb., March 20, 1891.

Received of J. Lerch, Two Hundred Dollars, for a black mare, warranted only six years, sound, free from vice, and quiet to ride and drive.

Charles M. Smith.

ALL THE DIFFERENT FORMS OF RECEIPTS.

Receipt for Payment on Account.

\$250.00. *Kaperville, Ills., July 4, 1891.*

*Received of J. L. Nichols, Two
Hundred and Fifty Dollars on account
J. K. Rohmer.*

2. Receipt for Settlement of an Account.

Joliet, Ills., March 20, 1891.

Received from Thomas Rourke, Two Hundred and
Twenty $\frac{14}{100}$ Dollars, in settlement of account to date.

C. S. Selby.

3. Receipt in Full of all Demands.

Meriden, Conn., Jan. 14, 1891.

Received of E. R. Wicks, One Thousand Dollars, in full
of all demands to date.

J. F. Hielscher.

4. Receipt for a Particular Bill.

Brooklyn, N. Y., Aug. 1, 1891.

Received of Morris Cliggitt, Four Hundred Dollars, in
Payment for a bill of Merchandise.

B. G. Barrett.

5. Receipt for Rent.

Snyder, Tex., Mar. 20, 1891.

Received of L. Heininger, Forty Dollars, in full for one
month's rent of residence at 44 Olive Street.

J. G. Litt.

6. Receipt for a Note.

Rec'd, Buffalo, March 6, 1891, from Messrs. Taylor & Co.,
their note of this date, at three months, our favor, for Twelve
Hundred and Twenty Dollars; which, when paid, will be in
full of account rendered to 1st instant.

\$1220.00.

William Barber.

7. Receipt for Service.

Lemont, Ill., July 23, 1891.

Received from Samuel Lynn, Forty-Four Dollars, in full
for service to date.

\$44.00.

Daniel Furbush.

8. Indorsement of a Partial Payment of a Note.

Rec'd, March 4, 1885, on account of within note, Three Hundred Dollars (\$300.00).

9. Receipt for Borrowed Money.

\$35.00. Naperville, Ills., July 20, 1891.

Borrowed and received from D. B. Givler, Thirty-Five Dollars, which I promise to pay on demand, with interest.

Henry Raymer.

10. Receipt for Property.

Rochester, N. Y., April 14, 1891.

Received of Louis Heininger, the following enumerated articles, to be held in trust for him, and returned on his demand: One Gold Watch, two Promissory Notes, each dated March 4, 1886, and signed by Henry Taylor,—one for Three Hundred Dollars, and one for Seven Hundred, each due one year from date.

William Place.

11. Receipt for Payment by the hand of a Third Party.

\$450.00. Joliet, Ky., June 4, 1891.

Received from Carl Cook by the hand of Frank Furbush Four Hundred and Fifty Dollars, in full for proceeds of sale of stock, sold May 28, 1891.

John Rourke.

HOW TO WRITE ALL KINDS OF ORDERS.

\$54.00. Baltimore, Oct. 14, 1891.

Messrs. M. Brown & Co. will please pay to the bearer Fifty-four Dollars in goods, and charge the same to my account

J. B. Moulton.

2.

In Full of Account.

\$25.00.

St. Louis, April 13, 1891.

C. A. Mather, Esq.:

Please pay John Rickert, or
bearer, Twenty-Five Dollars in goods, and this shall be your
receipt in full of my account.

P. D. Crimmins.

3.

For Goods.

New Orleans, March 4, 1891.

Mr. W. W. Walsworth;

Please send me per bearer ten barrels of Genesee
Flour, and oblige,

Yours truly,

Minnie Howard.

Orders are negotiable, but the person on whom they are drawn is not
under obligation to pay them, unless they have been accepted, for an order
partakes of the nature of a draft.

HOW TO WRITE ALL KINDS OF DUE-BILLS.

\$125.00.

Chicago, Aug. 14, 1891.

Due Henry Harrington, for value
received, One Hundred and Twenty-five
Dollars, with interest.

D. Zinger.

On Demand.

\$250.00.

Naperville, Ill., July 1, 1891.

Due J. O. Everett, on demand, Two Hundred Fifty Dol-
lars in goods from my store, for value received.

A. T. Hanson.

In Merchandise.

\$1000.00.

Lincoln, Neb., Nov. 1891.

Due R. Williams, or order, One Thousand Dollars, pay-
able in wheat at market price, on the first day of January
next.

Charles Lamb.

A Due-Bill is not generally payable to order, nor is it assignable by mere
indorsement. It is simply the acknowledgment of a debt; yet it may be
transferred.

Due-bills do not draw interest, unless so specified.

HINTS AND HELPS FOR WRITING, ACCEPTING, AND TRANSFERRING ALL KINDS OF DRAFTS.

1. A draft is a written order by one person on another for the payment of a specified sum of money.

2. The one who writes the draft is called the "*drawer*," the one on whom it is written the "*drawee*," and the one to whom it is to be paid the "*payee*."

3. Drafts may be made payable at sight, on demand, or at a certain time after date, or after sight.

4. The person drawn upon is under no obligation to the holder of the draft unless he accepts it.

5. The usual method of writing an acceptance is, to write across the face of the draft, with red ink, the word "*Accepted*," following with date and signature.

6. When acceptance or payment is refused the draft is protested.

7. A protest is a formal declaration made by a notary public, under his hand and seal, at the request of the holder, for non-acceptance or non-payment, and the parties liable are formally notified.

8. Drafts are negotiable both before and after acceptance.

9. Drafts drawn at sight or on demand are not presented for acceptance, but for payment only.

10. Drafts may be drawn to one's own order, and then indorsed in favor of the party to whom they are to be sent.

11. In buying a draft at the bank, it is always best to have it made payable to yourself, and then indorse it in favor of the party to whom you intend to transfer it. This gives you a good receipt for the money.

12. A promise to accept a draft will be equivalent to an acceptance if it has given credit to the bill.

13. Drafts on foreign countries are usually drawn in sets of three, each one referring to the other two, in order to prevent loss in transmission. They are sent by different routes, and the payment of one of them cancels the three.

14. Should the person upon whom the draft is drawn die before it was accepted, it should be presented for acceptance to his legal representatives.

FORMS OF DRAFTS.

Accepted Draft.

$\\$250\frac{75}{100}$ At Ten days' sight, of Thomas W. Jones, Fifty.....$\frac{75}{100}$ Dollars, Value rec'd, which To R. R. Robinson & Co., Wilmington, Del.	Aurora, Ills., Dec. 8th, 1891. pay to the Order.... Two Hundred and place to Account of J. R. Williams.
---	---

Accepted Dec. 12, 1891.
R. R. Robinson & Co.

1. Sight Draft.

\$500.

Naperville, Tenn., July 10, 1891.

At sight pay to the order of Frank Keeler, Five Hundred Dollars, and charge to the account of

To D. Bowers,
Meriden, Ills.

E. Miller.

2. Time Draft.

\$100.

Troy Grove, Ills., Aug. 1, 1891.

At ten days' sight pay to the order of Bernie Rogers at the Mendota First National Bank, One Hundred Dollars.

Value received.

Clark Dowling.

To Chas. Strong,
Mendota, Ills.

3. Time Draft, Second Form.

\$450.30.

Ottawa, Fla., July 5, 1891.

Ten days from date pay to J. L. Nichols, or order, Four Hundred Fifty $\frac{30}{100}$ Dollars. Value received.To Fred. J. Davis,
Ottawa, Fla.

William Curtis.

4. Drafts to My Own Order.

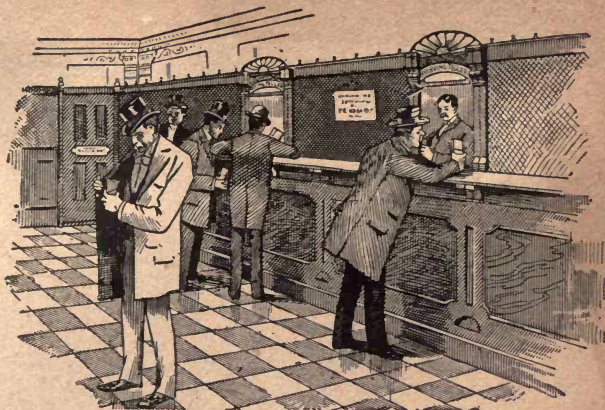
\$500.

Wheaton, Ala., May 1, 1891.

Ten days after sight, pay to my own order Five Hundred Dollars, and charge to

To Reed Avery,
Earlville, Ills.

Rufus Parks.



DOING BUSINESS WITH A BANK.

HOW TO DO BUSINESS WITH A BANK.

1. National Banks are required by the United States to deposit interest bearing bonds with the Treasurer at Washington in proportion to the capital stock paid in.

2. Banks of "circulation and deposit" have the use under certain restrictions of capital paid in by the stockholders, the money belonging to the depositors, and the notes of their own circulation.

3. Make your deposits in the bank as early in the day as possible, and never without your bank-book.

4 Always use the deposit tickets furnished by the bank. When checks are deposited, the banks require them to be indorsed, whether drawn to his order or not.

5. Keep your check-book under a lock and key.

6. Draw as few checks as possible; when several bills are to be paid, draw the money in one check.

7. Do not allow your bank-book to run too long without balancing. Compare it with the account of the bank.

8. In filling up checks, do not leave space in which the amount may be raised.

9. Write your signature with the usual freedom, and never vary the style of it.

10. Every check is paid by the bank at its own risk. If forged the bank must lose the amount.

11. If a raised check is paid by the bank, it can only charge the depositor the amount for which he drew.

12. Always keep the stub of your check-book, and in issuing a check always fill the stub out first.



HOW BANKING IS DONE.

1. **Custodian of Money.**—A banker is the custodian of the money of other persons. Such is his business, viewed in its simplest aspect. A banker, if he hoarded the money deposited with him, would be simply a cash-keeper to the public; his bank would be literally a bank of deposit. Even were the business of banking limited to the keeping of deposits, it would be of no small advantage to society: the depositors would be relieved from the care of their money, and in many cases from the trouble of handing it to those to whom they required to make a payment. If the person to whom the depositor wishes to pay money intends also to deposit it, a transfer in the books of the banker from the one to the other, made on the order or check of the depositor, would effect the payment. The money itself would lie undisturbed.

2. **Lending It Out.**—But the business of receiving money has almost always been, and is now universally, combined with that of lending it out. A banker does not hoard all the money deposited with him—he gives the greatest portion out in loans. The lending of money is as much a part of his business as the receiving of deposits.

3. **Interest.**—For the money he lends he receives interest from the borrowers; and in this interest he is paid for his trouble in taking charge of the deposits, and for his risk of bad debts. The services that a banker performs as the cash-keeper of his depositors are great. In the case of persons not themselves in business it is quite usual for a banker to make all their money payments, beyond their small daily expenditure, and to receive the money payable to them.

4. **Discounts.**—Banks make their loans chiefly in the form of discounts; that is, upon bills of exchange. Commodities in the wholesale market are generally sold on credit. The buyer promises to pay the amount on a certain date to the seller, and his promise is contained in a bill of exchange. The seller transfers it to a bank, which, on the faith of it, advances the amount in loan to him, less discount, that is, interest of the money till the bill be due. This is called discounting.

5. **Bank-Notes.**—The chief object in the manufacture of bank-notes is to render forgery impossible, or at least easy of detection. This is sought to be effected by peculiarity of paper, design, and printing, or a combination of these means. The main reliance has been on mechanical design—the writing, the emblems, and the ornaments being so combined as to render forgery difficult.

6. **The Ink.**—The ink, too, is peculiar, being the blackest and most indelible of inks. As a further security against forgery, a self-registering machine was contrived by Mr. Oldham. Copperplate printing was the only printing in use for bank notes till 1837, when a great improvement was made by Messrs. Perkins and Heath. This was the production of designs by the mill and die by mechanical pressure.

7. **Steel Plate.**—The pattern is engraved on a soft steel plate, which is then hardened, to transfer the pattern by pressure to a soft steel roller, on which, of course, the pattern is produced in relief; the roller or mill is then hardened, to reproduce the pattern in the plate from which the printing is to be done; and thus almost any number of plates for all common purposes can easily be produced. No Bank of England notes are issued twice.

HOW TO FILL OUT A CHECK.

IOWA.

\$ _____ 18 _____

First National Bank

Pay to _____

or Order,

Dollars,

No. _____

1. On the first blank line at the top write the number of dollars in figures, and then the date in the blank line following the name of the town and State.
2. After the words "Pay to" write the name of the party in whose favor the check is drawn, and on the next line below write out the amount to be paid in full.
3. On the last line at the left, write the number of the check (if you desire to number it) and then sign your name on the last blank line at the right.



Toronto, *Nov 5,* 188*9*

First National Bank

Pay to — *James Munro* — or order,
One Hundred — *X* ¹⁰⁰/₁₀₀ Dollars.

J M Turner



COMMON FORM OF BANK CHECK.

(FOR INTEREST DUE ON MORTGAGE!)

\$75.^x/₁₀₀

CHICAGO, August 1, 1889

Received of G. A. Catoni Seventy-five Dollars, in full of one year's interest, due this day, on his mortgage to me, dated August 1st, 1881, for Six Hundred Dollars.

No. 6.

Edw. Frost.

A RECEIPT FOR INTEREST DUE ON A MORTGAGE.



Exchange for £100. New York, May 1, 1892.
Sixty days after sight of this First of Exchange,
____ (Second and Third of the same tenor and date unpaid), ____
Pay to the order of W. P. Bryant & Son
____ One Hundred Pounds Sterling ____
Value received, and charge the same to account of
To Messrs. Morgan & Co., W. H. Cannon.
No. 74 London

A FOREIGN DRAFT, OR BILL OF EXCHANGE.



(JOINT NOTE NEGOTIABLE.)

\$100.00

Montreal,

July 1, 1889.

Three months after date we promise to pay

W. R. Morris

or order,

at Canadian Bank of Commerce here,

One Hundred

x Dollars,

100

for value received.

J. David
W. R. Morris

JOINT NOTE THAT CAN BE TRANSFERRED.



	 (JOINT AND SEVERAL NOTE NEGOTIABLE.) Buffalo <i>July 1, 1889</i> <i>Four months</i> after date, we jointly and severally promise to pay <i>J. H. Cameron</i> or order. at <i>Standard Bank</i> here, <i>Two Hundred</i> $\frac{X}{100}$ Dollars. for value received.  <i>C. O. Dea</i> <i>Edw. Trout</i>
---	--

A JOINT AND SEVERAL NOTE TRANSFERABLE.

HOW TO ENDORSE A CHECK AT THE BANK.

1. The Check is the most common commercial paper in use, and it is astonishing to see how many intelligent and educated people lack the necessary information on this subject.

2. Write *across* the back (not lengthwise) near the left end.

3. Simply writing your name on the back is a blank endorsement, and signifies that it has passed through your hands, and is payable to bearer.

4. If you wish to make the check payable to some particular person, write: Pay to the order of (*Person's name*), and then sign your name below.

5. Always endorse a check just as it appears on the face. If a check is payable to F. Block, it cannot be endorsed Frank Block. If the spelling of the name on the face of the check is wrong, endorse first as the name appears on the face, and below this first endorsement write your name correctly.

6. If the name on the face of the check is written Rev. F.W. Heidner, it must be so written in the endorsement.

7. If you wish to deposit a check, write: "For Deposit," and below this your name.

Form of an Endorsement When Transferred.

Pay to the order of M. Rathisber- ger. D. C. Burkey.	
---	--

When Presented for Payment.

F. Smith.	
-----------	--

No. 1.

Feb. 2d, 1887.

Wm. F. Barker,
for Merchandise.

\$300.

300

No. 1. Naperville, Ill., Feb. 2, 1887.

National Exchange Bank,

Pay to..... Wm. F. Barker,.....or Bearer,

Three Hundred⁰⁰/₁₀₀ Dollars.

\$300.

F. A. Mauer.

\$240⁴⁰

To C. C. Mumm.

For Merchandise.

Date March 3, 1887.

Time One year.

Due March 6, 1888.

No. 1.

\$240.⁴⁰ Naperville, Ill., Feb. 3, 1887.

One year.....after date...I..promise to pay to

the order of..... C. C. Mumm.....

Two Hundred Forty.....⁴⁰/₁₀₀ Dollars,

at..six per cent. interest. Value received.

No. 1. Due.....

W. A. Thaduen.



PRESUMPTIONS OF LAW PERTAINING TO BUSINESS PAPERS.

1. **Law Takes Things for Granted.**—The law takes certain things for granted in connection with negotiable paper, and these things are accepted as true, unless proper evidence proves them to be false.

2. **A Valuable Consideration.**—Paper is always considered as having been given for a valuable consideration, unless the contrary can be shown.

3. **The Holder of the Paper is Considered the Owner.**—The holder of paper is regarded as the owner so long as no suspicious facts are shown in connection with his ownership.

4. **Received before Maturity.**—It is presumed that the holder received the paper before maturity until it is proved to have been transferred after it was due.

5. **Possession in the Course of Business.**—The holder is regarded as having come into possession of the paper in the course of his business, and for value, unless good evidence disproves these presumptions.

6. **Indorsements Before Maturity.**—Indorsements are supposed to have been made before maturity, unless it clearly appears otherwise.

7. **Maker and Indorser's Liability.**—The maker of a note is considered as the first debtor, and the indorsers are looked upon as conditionally liable.

8. **Acceptor of a Draft the First Debtor.**—The acceptor of a draft is presumed to be the first debtor, and the drawer and indorsers to be only liable in the event of his failure to meet the obligation.

9. **Negotiable Paper Means Just What It Says.**—The law presumes that negotiable paper means just what it says, and evidence is not permitted to prove that it does not.

10. **Mistake in the Amount.**—If a mistake is made in stating the amount, evidence is allowed to correct it.

11. **Time.**—The time of negotiable paper, however, can not be changed by outside evidence.



RECEIPT FOR A LOST NOTE.

152

\$300.00

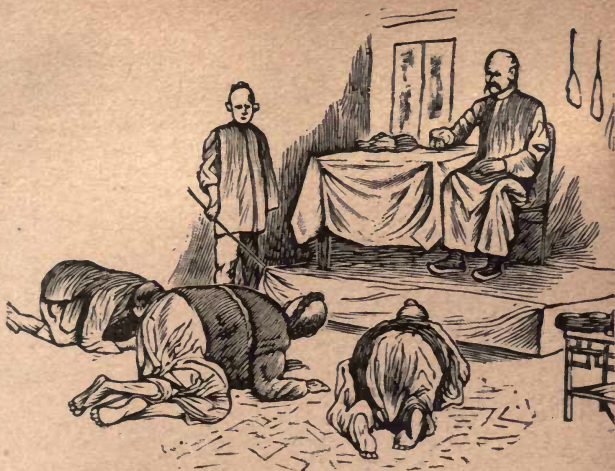
Fox Lake, Wis., May 15, 1894.

Received of James W. Blackfoot,

Three Hundred Dollars, in full payment for a certain note
given by said James W. Blackfoot, dated May 12, 1893,
calling for Three Hundred Dollars; which said note is lost,
destroyed, or mislaid, and this receipt is a guarantee against future
demands on account of said note.

J. M. Trueheart.

N. B.—Better never lose a note.



A CHINESE COURT.

THE LAW GOVERNING LOST NOTES OR BILLS.

1. **The Old Law.**—Formerly no action could be brought on a negotiable note or bill which was lost, if at the time it was lost it was transferable by delivery only, or had been endorsed and transferred before or after maturity.

2. **Bond.**—If a party should refuse to pay a note or bill which has been lost, he may be sued and compelled to pay it, but the party collecting it may be required to give a bond, so that the note in question may never appear for payment.

3. **Proven.**—Of course it is necessary to establish by sufficient proof, that the note for a certain amount by a certain party or parties had been given and up to date not paid. The maker of the note can compel the holder of the note to give evidence of the unsatisfied debt covered by the lost note.

4. **Payable to Bearer.**—If payment of a lost note or bill is made without notice of loss, to the finder, the paper being due and payable to the bearer, the payment is good. And if it comes into the hands of an innocent purchaser, before due, he may collect the full amount of note, and the loser of the note cannot recover it.

5. **A Part of a Bill or Note.**—Where part of the bill or note has been torn off and lost by accident, that fact can be shown by presenting the remaining part as evidence of the debt.

6. **Caution.**—If a note or due-bill has been lost, it is best to take disinterested parties and interview the maker and secure his open acknowledgment of the amount of said note or bill before letting him know the bill or note has been lost or burned, for it may often be difficult to secure a sufficient amount of evidence to establish the debt.

7. **Informal Notes.**—Informal notes are regarded with suspicion, although they may be collectable. "I. O. U. ten dollars," "forty weeks after demand," "I promise NEVER to pay," etc., are held to mean what the circumstances of the case may indicate was intended. The word "never" was held to be surplusage and the note good.

HOW TO TRANSFER ALL KINDS OF PAPER.

1. **A Legal Transfer.**—A legal transfer of commercial paper is usually made before it matures, and the law protects the innocent holder of it in his possession. Even if he buys it from the thief who stole it, or from the party who found it or got it by fraud, it belongs to him, if he knew nothing of the illegal transactions and acted without knowledge of the theft or fraud.

2. **Usual Form.**—Paper is usually transferred by indorsement (the seller placing his name on the back of the note or bill.) Thus the indorser agrees to pay the amount if the maker does not, and he is therefore responsible, if properly notified when the paper is due and is not paid.

3. **Blank Indorsement.**—A blank indorsement most commonly used in business is simply writing the name on the back of the note or bill, and after the first indorsement it may be transferred by delivery the same as a government bond or bank bill.

4. **Peculiar Sacredness of Commercial Paper.**—The law protects the holder of negotiable paper in his possession of it, when it would not protect him in the possession of any other kind of property, for there is a peculiar sacredness attached to paper. Thus: If A had stolen a horse from B and sold it to C, the law would not protect C, but would allow B to take the horse. Whereas in case of a note, the law would protect C in his ownership of the note and he could hold the maker for the amount, if C was innocent and



ARGUING THE CASE OF A LOST NOTE.

knew nothing of the way in which A got possession of the note.

5. **The Purchaser.**—If the purchaser is aware that there are any defects about a note or bill, or if there is anything suspicious, he buys it at his own risk.

6. **Transferring Found or Stolen Paper.**—Should A lose his note for \$300 and B find it, the latter could not compel A to pay it, unless he could prove that he came fairly into possession of it. No thief could collect a note himself which he had stolen if the fact of his theft could be proved, but if the note had a blank indorsement on the back of it, he could transfer or sell the note to an innocent party who could collect the note if he can show he made the purchase in good faith.

7. **Void Paper.**—Paper void where made is everywhere void. Even in case of void paper, a party who indorses it over to an innocent holder would be bound by his indorse-

ment, because he made a new contract to pay it when he endorsed it.

8. **Indorsement of a Note before It Is Made.**—When a party indorses a note before it is made, and it is afterwards made for a larger amount than was agreed, he cannot escape his liability to an innocent holder by pleading that fact. The rule is the same when a party accepts a blank draft.

9. **Avoiding Liability.**—An indorser can avoid liability by writing the words “without recourse,” or, “without recourse to me.” He can also specify what use is to be made of the funds when the paper is made, as for instance: “Pay Irving Taylor, or order, for credit of my account.”

10. **After Maturity.**—Paper can be transferred after maturity and usually no difficulty will arise over it, but the maker of the note may bring in various forms of excuses, and the law will always defend him by admitting, as evidence, any plea which he may choose to make as a defence.

11. **An Innocent Holder.**—An innocent holder of paper, having paid value for it before maturity, can hold both the maker and indorser responsible for payment.

12. **General Rule.**—In the transfer of commercial paper the indorser is held equally responsible for payment with the maker, and it is a safe rule to require the indorsement of the party who holds the paper before accepting it. An indorser who has paid a note can afterwards sell it. In the case of accommodation paper, however, when the payee has once paid it the paper is cancelled, and cannot again be transferred so as to give the holder a right of action against anyone, except the party who paid and then transferred it.

DEMAND OF PAYMENT.

1. **Time and Place.**—Demand should always be made at the proper time and place. If the name of a bank or any other place is mentioned in the paper, it should be made there.

2. **Insolvency.**—If the debtor is bankrupt, it is no reason why a demand should not be made on him.

3. **In Person.**—Demand must be made in person, and it cannot legally be made by mail.

4. **Possession of Paper.**—The party making the demand must have possession of the paper for the debtor can insist of having it delivered to him when paid.



— o DETECTING THE FORGERY. o —

5. **Lost Paper.**—In case the paper is lost, a bond of Indemnity must be made and tendered to the debtor, as protection in case it is ever found.

6. **Refused Payment.**—If demand is legally made and it is refused, the paper must be protested and the proper parties notified. This is usually the work of a Notary Public.

THE LAW GOVERNING FORGED PAPER.

1. **Forgery.**—Any material alteration made on commercial paper with intent to defraud is forgery.

2. **A Forged Instrument.**—A forged instrument is not commercial paper, for it represents neither a contract nor property, and no rights whatever are gained by its possession or transfer. The paper is simply worthless except as evidence against the forger.

3. **No Responsibility.**—The person whose name is forged cannot be made responsible. The act is not his, and one certainly should not be held responsible for another's acts which are entirely unauthorized and without notice.

4. **The Purchaser of Forged Paper.**—It makes no difference how careful or honest one is who takes forged paper; no matter what the consideration may be, the paper itself is worthless, and one who sells it to another in reality sells nothing. The one who buys forged paper however, may recover what he paid for it from the one from whom he bought it, because it was money paid under mistake. The person who took the paper from the forger must always bear the loss, unless he can recover the money from the person who committed the forgery.

5. **Raising the Amount.**—Paper is sometimes forged by erasing the amount named in the genuine paper and putting in a larger amount. The paper is then perfectly good for the original sum, but wholly worthless as to the amount raised. Example: If a check is drawn for \$5.00 and it is raised to \$50.00, the signer of the check will only be held for \$5.00, and whoever takes the check for \$50.00 will lose the \$45.00, unless he can secure it from the forger.

6. **Caution.**—Never buy a paper from a stranger, unless he can show evidence of legitimate business transaction with the person or persons whose papers he desires to transfer.

HOW TO DETECT A FORGERY.

1. **Mr. D. T. Ames**, the well-known handwriting expert, who exposed the forgery in the Morey-Garfield matter, says that but for the assistance of the microscope or camera in elucidating the very difficult matters that are presented to him almost daily, he would often meet with insuperable difficulties in proving his case.

2. **"Jurors as a Rule,"** says Mr. Ames, "are men who must have a thing demonstrated in the clearest and most simple manner. I can myself tell almost at a glance a forgery from a genuine piece of handwriting, because it has crookedness written all over the face of it to the eye experienced in examining such things. I can also see quickly under the microscope the particular defects that characterize spurious handwriting."

3. **One of the most difficult things** for the forger to manage is to get the same amount of shading on his letters as the original writing shows. This necessitates the retouching of each letter separately after the outline has been made, and under the microscope these patches are so conspicuous that they demonstrate the forgery immediately. A photomicrograph similar to the one of which I give you an illustration can be easily placed in the hands of the juror, who can thus without leaving his seat, see just what I refer to in my testimony. There are also frequent breaks in the let-



A RETOUCHE LETTER
GREATLY MAGNIFIED.

ters where the lines do not touch exactly, showing how the copying was done piecemeal, and though apparently finished off neatly the letters or parts of letters are not fitted together in the manner that they would be when written naturally. The photomicrograph also frequently shows signs of pencil marks in which the writing was first traced, and which to the naked eye of the forger appeared to be obliterated, although the searching eye of the camera shows them up.

4. **Another characteristic of forged handwriting** which the camera discloses is the failure in retouching to cover the surface thoroughly with the ink as would be done in natural writing. The letter J which you see, is a fair sample of what I mean; and it



UNITED STATES DETECTIVE OFFICE.

comes up very conspicuously with its tell-tale defects under a microscope. All really scientific examinations of handwriting are based upon the well-known fact that the handwriting of every adult must inevitably have multitudinous distinctions and habitual peculiarities.

5. Patched Printing Traced in Sections.—Of many of these the writer is himself unconscious; such as initial and terminal lines, forms and methods of constructing letters, combinations, relative proportions, turns, angles, spacing, slope, shading (in place and degree), crosses, dots, orthography, punctuation, etc. These peculiarities are the outgrowth of long habit, and come at length to be produced and reproduced by the sheer force of habit, as it were, automatically by the hand, its movements being independent of any direct thought or mental guidance. Being thus unconsciously produced, and in the main unnoted by the writer, they cannot be successfully avoided or simulated through any extended piece of writing. To do so a writer would be required to avoid that of which he is not conscious in his own writing, and to copy the undiscovered habits of another writer.

AN ACTUAL FORGERY.

The consideration of him and affection I release and
 indebted to my son John the sum of \$1000
 to A. Adams, Bro. York, General, Black Rock, N.Y. and
 I hereby declare that I have paid in full for
 Mrs. J. Adams, Black Rock, N.Y.
 The witness whereof I have this 2nd day of May 1862
 at New York City, my hand and seal
 attached

Chas. C. Frost

THE PIECING PROCESS.

The above words were cut out of a genuine letter and pieced together, to make the
 desired document. Then they were placed over a glass and traced, making
 a complete copy, which for a time baffled the best authorities on forgery.

An Constitution of law and affection I release and
 discharge to my own liking the labor made here upon
 the 1 stands New York, Central Rail Road Stock and
 I hereby declare that I hold said stock in trust for
 Mrs. J. E. P. B. B. B.

In witness whereof I have this 2^d day of May 1862
 at Syracuse signed my hand and seal
 attest

E. C. Fort

A CLEAN TRACING OF THE PIECED DOCUMENT.

The penalty for forgery is one of the severest. Forgery is considered by our laws one
 of the gravest crimes, except those of murder and manslaughter.

AN ACTUAL TRANSACTION.

In consideration of love and affection I release and discharge to my son Lewis the loan made him upon ten (10) shares New-York Central Rail Road Stock and I hereby declare that I hold said Stock in trust for Mrs. Mary Redfield

In witness whereof I have this 2^d day of May 1862
at Syracuse N.Y. affixed my hand and seal
Attest

E. C. Goff

L. H. Redfield

— A FORGED DOCUMENT. —

The above shows the full signatures, and the document is complete just as presented by the forger.



"MY BOY IS TO BE HUNG—CAN'T YOU SAVE HIM?"

From Forgery to Murder.



IT TAKES TWO TO MAKE A CONTRACT.

HOW TO WRITE A CONTRACT.

Rule :—1. The parties to a Contract are taken in the order in which they are written and referred to as "the party of the first part," "the party of the second part," without repeating their names. It matters not which name is written first.

2. After writing the date, names of the parties and their places of residence, state fully all that the first party agrees to do, and then state all that the second party agrees to do.

3. Next state the penalties or forfeitures in case either party does not faithfully and fully perform, or offer to perform, his part of the agreement.

4. Finally, the closing clause, the signatures and seals, the signatures of witnesses are written. (A seal is simply the mark of a pen around the word "seal," written after the signature.)

No particular form of legal language is necessary. Use your own words and state in a plain way just what you want *done*. Anyone who can write a letter and express his desire in an intelligent manner can write a contract.

Errors in grammar or spelling do not affect the legality of the agreement.

If the language should be obscure on certain points, the "court" will always interpret the *intent* of the parties when they entered into the agreement.

When an agreement is written it must all be in writing. It cannot be partly written and partly oral.

The Law Governing all Kinds of Contracts.

1. A contract is a mutual agreement between two competent parties for a valuable consideration to do or not to do a particular thing.

2. It must have, 1. Parties ; 2. Subject Matter ; 3. Consideration ; 4. Assent of the parties. There cannot be a contract when any of these are wanting.

3. A consideration is the *thing* which induces a person to make a contract.

4. An alteration of a contract in a material part, after its execution, renders it void.

5. A contract the law forbids is void. Fraud renders all contracts void.

6. A contract made by a minor, a lunatic, or an idiot is not binding upon him, yet he can hold the party with whom he contracts, to all the conditions of the contract.

7. A contract not consistent with law or for immoral purposes is void.

8. A fraudulent contract may be binding on the party guilty of fraud, although not laying any obligation on the part of the party acting in good faith.

9. A contract for the sale or purchase of personal property over a certain amount—ranging from \$30 to \$200 in the different States—must be in writing.

10. A contract which cannot be performed within a year must be in writing.

11. A guaranty must be in writing.

12. If no time of payment is stated in the contract, payment must be made on the delivery of the goods.

13. A contract totally restraining the exercise of a man's trade or profession is void, but one restraining him in any particular place is not void.

14. An offer or proposal, which includes the essential parts of a contract, becomes a contract as soon as accepted.

15. A contract required by law to be in writing cannot be dissolved by verbal agreement.

16. A contract cannot be partly written and partly verbal. It must be wholly written or wholly verbal.

IGNORANCE OF LAW EXCUSES NO ONE.



JUSTICE.

CONTRACTS THAT ARE NOT LAWFUL.

1. A contract to commit a breach of peace.
2. A contract in violation of a statute of the State in which it is made.
3. An agreement to prevent competition on a sale under an execution.
4. An agreement to prohibit the carrying on of a trade throughout the State.
5. A contract with an intoxicated person, lunatic or minor.
6. All agreements in which there is fraud.
7. An agreement made by threats or violence.
8. A contract impossible in its nature : such as crossing the ocean in one day, is void.
9. Guardians, Trustees, Executors, Administrators or Attorneys cannot take advantage of those for whom they act by becoming parties to the contract.
10. Useless things cannot become the subject of a contract: such as agreeing not to go out of the house for a month.

11 The right to vote or hold office, etc., cannot be sold by contract.

12. Contract without a consideration : such as a promise to make a gift, cannot be enforced.

13. An agreement for immoral purposes.

14. Where consent to an agreement is given by mistake, it cannot become a contract.

15. If a thing contracted for was not in existence at the time of making the contract, such as buying a horse and not knowing that he was dead at the time, is not good.

16. If a person agrees to serve as a laborer or clerk, he cannot be compelled to fulfill his agreement; damages, however, can be recovered.

17. Two or more persons intentionally cannot make a contract to the injury of a third person.

18. Wagers or bets cannot be collected by law.

19. More than legal interest cannot be collected.

20. Contracts for concealing felony or violating public trust, for bribery and extortion are prohibited.

21. Contracts in which there is misrepresentation or concealment of material facts cannot be enforced. It is fraud to conceal a fraud.

22. Money borrowed for the purpose of betting, the lender knowing it to be for that purpose, cannot be collected.

23. If any part of a contract is illegal, the whole is illegal.

24. A verbal release without payment or satisfaction for the debt is not good. Release must be under seal.

25. If there are two parts to a contract, and one conflicts with the other, the first part holds good in preference to the last.

26. An agreement with a thief to drop a criminal prosecution, by his bringing back the goods and paying all damages, is not good, and will be no bar to a future prosecution.



AN OLD-TIME JUSTICE OF THE PEACE.

THE VITAL PART OF A CONTRACT.

CONSIDERATION.

1. **Definition.**—A consideration is the thing which induces parties to make a contract. It is the substantial cause or reason moving parties to enter into an agreement.

2. **A Sufficient Consideration.**—The law does not require that the consideration should be a good or bad bargain. As long as something is done or suffered by either party, the consideration is good. The smallest consideration is sufficient to make it legal. The value of the consideration is unimportant. For instance : \$10,000 worth of property can be sold for \$1.00.

3. **Promise of Marriage.**—If a man promises a woman any certain sum of money if she would agree to marry him, he can be made to fulfill his promise, and the court will hold that the promise of marriage was a sufficient consideration for the money.

4. **A Valuable Consideration.**—A valuable consideration is one which is equal to money or may be changed into money.

5. **A Good Consideration.**—A good consideration is one which is based upon love, gratitude or esteem, or blood relationship. But in order to make a good consideration legal, the agreement has to be performed by one or both parties. For instance: If a man should promise to give a lady \$500 because he loved her, it could not be collected, but if the money was once paid to the woman it could not be recovered.

6. **Gratuitous Consideration.**—A gratuitous consideration is a consideration where something is done or money promised on account of some affection or charity, and like a good consideration the act must be performed in order to hold the party. For instance: If a father gives his son a note on account of his affection for him, the son cannot force the father to pay it; so also if a person subscribes for a church or charitable society he cannot be compelled to pay it, unless the church or society can show that it depended upon that money when it entered upon some contract, or assumed some obligation on account of it.

7. **Immoral Consideration.**—All considerations which are immoral are consequently illegal.

8. **Impossible Consideration.**—If a man should promise to cross the ocean in one day, or walk from Philadelphia to New York in two hours, or any consideration of such an impossible character, is illegal and void.





A Contract for Hiring a Farm Hand.

KNOW ALL MEN BY THESE PRESENTS :

That Fred J. Dolan agrees to work faithfully for E. E. Heidner, as a general laborer on his farm, and to do any work that he may be called upon to do in connection therewith, in the township of Freedom, County of La Salle, and State of Illinois, for the period of one year, beginning the first day of March next, 1890, for the sum of Twenty Dollars per month.

In consideration of the services to be performed, the said E. E. Heidner agrees to pay Fred J. Dolon, Twenty Dollars per month.

IN WITNESS WHEREOF, the said parties have hereunto set their hands this first day of January, 1890.

Fred J. Dolan.
E. E. Heidner.

LAND CONTRACT.

THIS AGREEMENT, made and entered into at *Dunkirk, N. Y., this fifth day of March, 1895*, provides as follows:

That in consideration of the sum of *Two Thousand (\$2000)* Dollars, to be paid as hereinafter specified, *John Brown*, of the *City of Dunkirk, N. Y.*, agrees to convey, by full Warranty Deed, to *Norman C. Stull*, of the *City of Buffalo, N. Y.*, the *Forty Acre tract of land lying four miles west of the city limits of Dunkirk, and known as the Lewis Shuman Estate*.

It is further provided, that the land described shall be conveyed as agreed, on or before *April 1st, 1895*, and that said *Norman C. Stull* shall, on receiving from said *John Brown* the Deed of Conveyance as mentioned, together with a full and complete Abstract of Title to date of conveyance of said land, pay to said *John Brown* the purchase price in full.

This Contract shall be binding upon the parties hereto, their heirs, executors, administrators and assigns.

Signed, *John Brown,*
Witness: *Richard Peck.* *Norman C. Stull.*

A CONTRACT FOR RENTING A FARM.

I, *John Smith*, do lease and convey unto *J. T. Hoge*, the *N. ¼ of the SE. ½ of Section 25* in the *Town of Flat Springs*, County of *Andrew*, and State of *Missouri*, for a term of *Two Years* from the *first of March next*, upon the payment of *Three Hundred (\$300) Dollars*, as follows: *One Hundred and Fifty Dollars the 20th of June next, and the remaining One Hundred and Fifty Dollars the first day of the following December.*

Witness my hand, this *20th day of October, 1894.*

John Smith.



Agreement for the Hiring of a Clerk.

THIS AGREEMENT, made this twenty-eighth day of June, one thousand eight hundred and eighty-five, between John Smith, of the Town of Naperville, in the County of Du Page, and State of Illinois, of the first part, and Richard Brown of the City of Chicago, in the County of Cook, State of Illinois, of the second part, witnesseth :

That the said John Smith has agreed to enter the service of the said Richard Brown as clerk, and covenants and agrees to and with the said Richard Brown, that he will faithfully, honestly, and diligently apply himself and perform the duties of a clerk in the store of the said Richard Brown, and faithfully obey all the reasonable wishes and commands of the said Richard Brown, for and during the space of one year from the thirtieth day of May next, for the compensation of Six Hundred Dollars (\$600) per annum, payable monthly.

And the said Richard Brown covenants with the said John Smith, that he will receive him as his clerk for the term of one year aforesaid, and will pay him for his services as such clerk the sum of Six Hundred Dollars (\$600) annually, in monthly payments.

In witness whereof, we have hereunto set out hands and seals, this twenty-eighth day of May, A.D. 1885.

John Smith. (SEAL)

Richard Brown. (SEAL)

John H. Wagner.



POPPING THE QUESTION.

ENGAGEMENTS TO MARRY; OR, MARRIAGE CONTRACTS.

1. **Contracts to Marry in the Future.**—Mutual promise by a man and a woman to marry at some future day, constitutes a valid contract.

2. **A Marriage Contract.**—A marriage is a civil contract, and is entered into by the mere consent of the parties. If the man says to a woman, "Will you marry me?" or words to that effect, and she says "Yes," or words that imply an affirmative answer, it is by law an agreement or promise of marriage, and both parties are legally held to carry out in good faith the promises thus made.

3. **Breach of Promise.**—If either party refuses to carry out the contract, he or she is guilty of breach of promise, and may recover damages of the other party. It is not very often, however, that the man sues the woman, though he has the right to do so if she fails to make good her promise.

4. **Necessary Proof.**—Generally in case of a lawsuit for breach of promise, there are no direct witnesses, as people generally become engaged without the presence of a third party, but the engagement may be implied by the conduct of the party sued.

5. **Implied Evidence.**—The promise of marriage is implied from circumstances, such as constant visits, presents, or open declarations of the parties, the reception of parents or friends, as an engaged couple, without any objections from the party accused. There are many ways of expressing serious intentions without an open declaration in words. Conduct speaks louder than words.

6. **Excuses for Breaking the Promises.**—A refusal may be justified on the ground of the bad character or conduct of the other party; poor health of either party is sometimes a good excuse, but not generally. If the woman were a widow or divorced, and concealed this fact from the man, this justifies a refusal to marry on his part.

7. **Time of Marriage.**—When a man promises to marry a woman without stating any special time, the law holds him guilty of breach of promise, unless he is ready at any time to fulfill his engagement within a reasonable time, five years was held by law as being an unreasonable time.

8. **When a Promise Is Not Binding.**—If either party is under twenty-one years of age, he or she is not bound by promise to marry, and the law will excuse them any time from making good the promise; but, if the man is over 21 years of age, he can be held, and must make his promises good or pay the damages.

9. **Seduction.**—Seduction of a woman under a promise of marriage, and subsequent refusal to marry on his part, is a crime, and is punished by severe penalties, as by impris-

onment and fine. A marriage of the party after the trial is commenced, and before the verdict is given, will save the accused from conviction.

10. A Cowardly Act.—A young man who makes promises of marriage to a young lady, or gives her reason to believe that he is sincere in his visits and intentions, and then without excuse or cause devotes his attentions to another, commits a cowardly act. No honorable young man will do it.

No young man has a right to demand a young lady's exclusive company, without some definite understanding, and a young lady is very injudicious, if not foolish, if she receives the attentions of a young man, who claims her entire society, without some understanding or promise of sincerity. When the promise of marriage has once been made, it should be kept in good faith, unless both parties mutually agree to dissolve. The law always requires the promises of marriage to be met in good faith.

LAW ON LOST PROPERTY.

While walking along the road, A finds by the roadside a pocketbook containing a sum of money. He picks it up, examines its contents and puts it in his pocket, but it happens that there is a hole in the pocket, and it falls out. He does not discover the disappearance till he reaches home. He then retraces his steps, and near where he found the pocketbook he sees a young man who has it in his hands. The young man had picked it up when it fell from the pocket of the first finder. Which has the best right to the pocketbook and its contents? The young man has a right to it as against the other. A not uncommon maxim is, "The last finder is the best owner."

LAW ON OPENING LETTERS.

A person who opens letters belonging to another which have been in the possession of the post-office authorities, before they reach the possession of the person to whom directed, the letters being opened for the purpose of abstracting their contents, or of obtaining information concerning the affairs of another, is liable to a fine of \$500 and imprisonment for one year. It makes no difference as to relationship.



THE LEGAL RELATION OF PARENT AND CHILD.

1. **Ancient Authority.**—In past ages the father was by custom considered as absolute monarch of the home. In the oriental countries of to-day, the same custom still prevails; modern progress, and modern ideas, however, have changed old customs, and the authority of the parent in civilized countries has been considerably limited by law.

2. **Rights of Parents.**—The parent has control of his minor child, and has all reasonable authority to enforce obedience. As long as the parent treats his child properly, no one has a right to interfere with his authority, or take the child away and retain him against the wishes of the parent.

3. **A Runaway Child.**—A child has no right to leave home without permission of the parent, and should a child run away he can be brought back by force. If relatives or other parties keep him and refuse to give him up, the parent by legal process can obtain possession of his child, unless it can be shown that the father is brutal, or is not capable on account of drunkenness or other causes to take proper care of his child.

4. **Adoption.**—Any child, whether its parents are living or not, may be adopted. In that case the parent is no longer entitled to the custody, but the adopting person is. The child cannot be adopted without the consent of its parents, if they are living, but the consent having once been given cannot be revoked. If the child is over fourteen years of age, it must also consent to the adoption. Under any circumstances the court has the right to refuse to permit the adoption if it considers that the person petitioning is not a proper person to have the custody.

5. **Method of Adoption.**—Application must be made at the county court, and the judge will consider the application and will pass upon it.

6. **Punishment of Children.**—A parent has a right to punish his minor child, providing he is not guilty of cruelty. Brutality is a crime, punished by severe legal penalties. The parent must be reasonable in his punishment, leave no bruises or in any way injure the health of the child.

7. **Right to Earnings.**—A parent is entitled to all the earnings of his minor child. If the child should refuse to turn over his earnings to the parent, the employer of the child may be notified, and be compelled to pay the parent only.

8. **Special Rights.**—The parent may, however, make free his child from all obligations to himself and allow the

child to collect his own wages and do for himself. When a parent thus makes public such a declaration, he cannot thereafter collect the child's wages.

9. **The Property of the Child.**—A parent may control the earnings of the child, yet he has no control of the property belonging to the child, either acquired by gift, legacy or any other way. If a parent should appropriate his child's property, it would be just as criminal in the eyes of the law as stealing any one else's property.

10. **Parents' Obligation to Support.**—Parents are legally held for the support of their minor children. If a child has property, it does not relieve the parent from the support of his child; he however can apply to court and get permission to use a part, or all of the income of the property for the child's support.

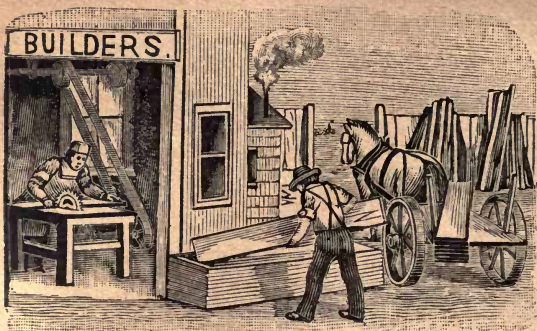
11. **Illegitimate Children.**—It is a parent's duty to support even an illegitimate child. Such a child has legally no father, but his putative father, as he is called, may be compelled by the overseers of the poor to furnish the child with reasonable support, so that it shall not become a "burden on the parish." All children born in wedlock are legitimate, unless it is proved that the husband could not possibly be the father. The adultery of the wife cannot affect the legitimacy of the child. He is conclusively presumed to be the child of the husband. It makes no difference how soon after the marriage the child is born. A child born the same day as the marriage, if subsequent to the ceremony, is legitimate, provided there is good reason for believing that the husband is not the father.

12. **Effect of Illegitimacy.**—The only legal effect of illegitimacy or any consequence is that the child cannot inherit property from his father; nor from his mother, if she has any legitimate children. He may, of course, take a legacy given to him by his putative father's will, but if there is no will he cannot inherit.

13. **Children's Obligations.**—Where the parents are unable to support themselves, the child is legally held for their support and care, but it must be first shown that the parent, or parents, are unable to support themselves.

14. **Crimes.**—The parent cannot be held for crimes committed by his minor child. If a child commits a premeditated crime, he is personally liable.

15. **Guardian.**—If a child has no parents living, a guardian may be appointed, or he may appoint his own guardian, who will in a legal sense exercise the prerogative of a parent.



AN AGREEMENT TO BUILD A HOUSE.

Be it remembered that on this 16th day of May, 1889, it is agreed between John Read, of Lisle, Illinois, and Z. Cooper, of Naperville, Illinois, in manner and form following, to wit: The said Z. Cooper, for the consideration hereinafter named, does, for himself, his executors, and administrators, covenant, promise, and agree, to and with the said John Read, his executors, administrators and assigns, that he, the said Z. Cooper, shall and will, within the space of six months, next after the date hereof, in a good and workmanlike manner, and according to the best of his art and skill, at Naperville, Illinois, well and substantially erect, build and finish, one house, according to the draft or plan hereunto annexed, and to compose the same with such stone, brick timber or other materials, as the said John Read, or his assigns shall provide and find for the same. In consideration whereof, the said John Read doth, for himself, his executors, and administrators, covenant and promise to, and with the said Z. Cooper, his executors, administrators, and assigns, well and truly to pay, or cause to be paid, unto the said Z. Cooper, the sum of Two Thousand Dollars.

In witness whereof we have hereunto set our hands and seals.

John Read. [Seal]

Z. Cooper. [Seal.]



A Contract for the Sale of Horses, Cattle, or other Personal Property.

This agreement, between A. B. Johnson and C. D. Coddington, made this nineteenth day of October, 1891, witnesseth :

That said A. B. Johnson, for the consideration hereinafter mentioned, shall sell and deliver on the first day of November next to said C. D. Coddington at his residence, One Double Wagon, Two Four-Year-Old Colts and Six Yearling Heifers.

That said C. D. Coddington, in consideration thereof, shall pay said A. B. Johnson Three Hundred Dollars, upon the delivery of said property.

In witness whereof we have this day set our hands and seal.

A. B. Johnson.

C. D. Coddington.

A Contract for Laying Tile or Building Fence.

(SHORT FORM.)

KNOW ALL MEN BY THESE PRESENTS : That this agreement, made this 1st day of July, A. D. 1891, between H. C. Naumann and G. C. Gasser, witnesseth :

H. C. Naumann agrees to lay one hundred twenty (120) rods of six-inch tile at forty cents (40c) per rod. The average depth and fall of said tile is to be sufficient to drain the land through which said tile may be laid. G. C. Gasser shall direct place and parts of land to be drained by the above specified number of rods of tile.

H. C. Naumann,
G. C. Gasser.

The Law Governing the Sale and Transfer of Property.

1. A sale is the exchange of property for money, which is either paid at once or to be paid in the future.

2. There are many complicated things pertaining to the sale of property which every thoughtful man should understand.

3. The thing sold must either exist at the time of the sale or there must be a well-founded reason that it will be in existence and in possession of the seller. For example: If a man sold a horse for \$100 and it transpires that the horse died before the actual time of the sale the transaction would not be a sale, otherwise it would.

4. Grain or other produce not yet sowed or planted can be sold because the seller may reasonably expect a crop. Machinery or other manufactured goods may be sold before they are made and the seller can be held to perform his part of the contract the same as though the articles actually existed at the time of the sale.

5. The thing sold must be specified and set apart as the property of the buyer. For example: The sale of ten bushels of wheat from a certain bin would not be a sale unless the grain was measured and set apart.

6. The price must be fixed by mutual consent, or be understood by the terms of the sale.

7. Any defects which can be seen in property or in animals when sold does not relieve the buyer from meeting his contract though he claims that he did not see the defects. *The law does not furnish eyes for the purchaser of property.*

8. But defects in property or animals which cannot be seen, and the seller makes no statement in reference to such defects, but recommends it as good or sound, relieves the buyer from fulfilling his part of the contract.

9. When nothing is said as to the time of payment when the sale is made the law presumes that the property must be paid for before the purchaser can secure possession. If credit is agreed upon the buyer is entitled to immediate possession.

10. The purchaser, in order to make good his bargain, should always advance a small amount, to bind the seller to the bargain.

THE LAW ON TRADING.

OFFER AND ACCEPTANCE.

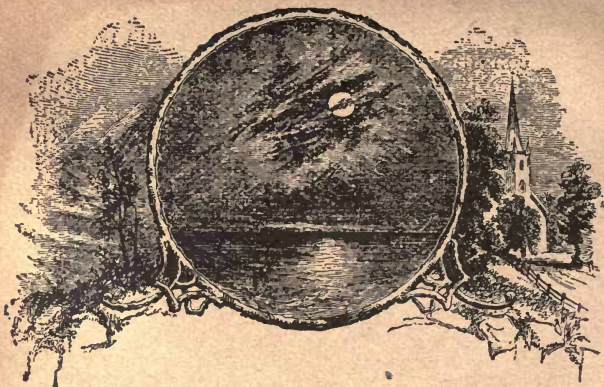
1. **Jesting.**—An offer made in a jest, though accepted, is not binding. The law presumes that an offer must be made with good intention.

2. **An Unconditional Acceptance.**—If an offer has been made, the acceptance must be without any conditions attached. Any acceptance upon the terms varying in the slightest degree from things proposed, is not binding until all the conditions are accepted.

3. **A Good Acceptance.**—An acceptance, to be good, must be such as to conclude a contract between the parties; and to do this it must, in every respect, meet and correspond with the offer, neither falling within nor going beyond the terms proposed, but exactly meeting them at all points and closing them just as they stand.

4. **An Offer.**—An offer may be withdrawn any time before it is accepted, but if no time is specified, then by the expiration of a reasonable length of time for acceptance the offer thereafter cannot be legally accepted. A limitation of time for which an offer is to run is an equivalent to the withdrawal of the offer at the end of the time named. Where parties are so situated that it is necessary to communicate by letter or telegram, the contract is complete the moment the acceptance is dispatched or the letter put into the post office, provided this is done within a reasonable length of time, or before notice of withdrawal of the offer is received. Any one receiving an offer by mail or telegraph, is entitled to a reasonable time in which to accept or reject it.

5. **A Notice of Reward for Information.**—The offer by way of advertisement of a reward for information leading to the restoration of property or the conviction of a criminal, addressed to the public at large, becomes obligatory, if not previously revoked, as soon as an individual, with a view to the reward, renders the specified service, but not before. To entitle one to the reward, he must have had notice of the offer at the time he rendered the service; for no one can assent to that which he has not heard of.



LEGAL GIFTS.

1. **Who Can Make Gifts?**—Any person legally competent to transact business, may give whatever he, or she owns, to any other person. A gift by a minor, a married woman, an insane person, or a person under guardianship, or under duress, would be void, or voidable, according to the circumstances.

2. **Delivery of Gift Necessary.**—A gift must be consummated, that is, the thing given must be delivered before any legal right rests in the grantee. A promise to give is not binding, as it is supported by no consideration. Delivery may be actual or constructive.

3. **Cannot Be Revoked by Donor.**—A gift made perfect by delivery, cannot be revoked by the donor; but if it prejudices the rights of existing creditors, it is void as to them. It is not, however, void as to future creditors, unless made under actual or expective insolvency, or with a fraudulent purpose.

4. **Gifts Because of Expected Death Revokable.**—Gifts because of expected death, are revokable by the donor if life is continued; even after delivery and acceptance. Such gifts are held to have been made because death was supposed to be at hand; and if it does not ensue, the gift is defeated, as the death, which was the cause of the gift, has not taken place.



FORM OF BILL OF SALE.

KNOW ALL MEN BY THESE PRESENTS, That in consideration of Twenty-three hundred (\$2,300) Dollars, the receipt of which is hereby acknowledged, I do hereby grant, sell, transfer, and deliver unto F. A. Lueben, his heirs, executors, administrators and assigns, the following goods and chattels, viz.:

Four Oxen @ \$50.00	-	-	-	\$200.
Twenty Head of Sheep @ \$4.00	-	-	-	80.
Two set Harness @ \$20.00	-	-	-	40.
Two Farm Wagons @ \$35.00	-	-	-	70.
One Corn Planter @ \$20.00	-	-	-	20.
Three Plows @ \$15.00	-	-	-	45.

To have and to hold all and singular the said goods and chattels forever. And the said grantor hereby covenants with said grantee that he is the lawful owner of said goods and chattels; that they are free from incumbrances, that he has good right to sell the same, as aforesaid; and that he will warrant and defend the same against the lawful claims and demands of all persons whomsoever.

In witness whereof, the said grantor has hereunto set his hand this 29th day of June, 1891.

Witness:

Charles E. Selby.

Jared K. Long. (SEAL.)



A MORTGAGE SALE.

They mortgaged their farm to start their son in business.

“Now over the hill to the poor-house.”

HOW MORTGAGES ARE WRITTEN.

RULES:—*Mortgages must be in writing, and must be in one single document, which contains the whole contract.*

It must be acknowledged and recorded.

When a mortgage is paid, or satisfaction given, it may either be written on the margin of the mortgage or by a receipt indorsed upon the mortgage, or it may be discharged upon the records whenever there is presented to the proper officers an instrument acknowledging satisfaction, executed by the mortgagee or his proper representatives.

THE LAW GOVERNING MORTGAGES.

1. Mortgages are conditional conveyances of estates or property by way of pledge to secure a debt, and become void upon the satisfaction of the indebtedness.

2. All mortgages must be in writing, and be signed and sealed.

3. There are two kinds of mortgages: a real estate mortgage, and a chattel mortgage. The former is a mortgage on real estate, the latter a mortgage on personal property.

4. A mortgagee may sell or transfer his mortgage to another party.

5. Mortgages given with the intent to defraud creditors are void, as to all persons knowing of the fraudulent intent.

6. When the debt is paid for which the mortgage was given, the mortgage is void.

7. A foreclosure is the legal proceeding to sell the mortgaged property to satisfy the debt.

8. A chattel mortgage given on personal property which is left in possession of mortgagor, is *prima facie* void as to creditors of mortgagor. To render it valid it must contain permission by mortgagee that mortgagor may retain possession of the chattels, and that mortgagor may take possession of them whenever he feels himself insecure for any reason.

9. Mortgages should be recorded with promptness after their execution. The first mortgage on record is the first lien on the property, notwithstanding another mortgage was given first, as to all persons not aware of that fact.

10. A mortgage on real estate is released by deed of a lease under seal, and acknowledged, or receipt of satisfaction of the debt entered upon the margin of the mortgage by mortgagee.

11. Chattels must generally be acknowledged before a Justice of the Peace of the Township where the mortgagor resides.

12. *In writing mortgages always insert the same description of land and lots as given in the deeds of same property.*

MORTGAGE—Short Form.

THE MORTGAGOR, *Samuel P. Smith, and Sarah E. Smith, his wife*, of the Town of *Naperville*, in the County of *Du Page* and State of *Illinois*, MORTGAGE and WARRANT to *James Y. Scammon*, of the City of *Chicago*, County of *Cook*, State of *Illinois*,

to secure the payment of *two certain promissory notes, bearing even date herewith, for the sums of One Thousand and Fifteen hundred Dollars respectively, payable to the order of the said James Y. Scammon, in three and five years from the date thereof, respectively, with interest at the rate of seven (7) per cent. per annum, payable annually, the following described Real Estate :*

The South-West quarter of Section number Twenty-one (21) in Township number Thirty-eight, (38) North, of Range number Eleven (11) East, of the Third Principal Meridian.

Also : Lots number one (1), three (3) and five (5) in Block number nineteen (19) of Schofield's Addition to the Village of Naperville. All situated in the County of Du Page in the State of Illinois, hereby releasing and waving all rights under and by virtue of the Homestead Exemption Laws of this State.

Dated this 1st day of January, A.D. 1886.

Signed, Sealed and Delivered
in Presence of

.....

}

Samuel P. Smith. (L.S.)

Sarah E. Smith. (L.S.)

ASSIGNMENT OF MORTGAGE.

KNOW ALL MEN BY THESE PRESENTS :

That I, *Henry Betzold*, the within named mortgagee for a consideration of *Eight Hundred Dollars, (\$800)*, hereby assign, transfer, and set over unto *E. B. Neeman*, his heirs and assigns, the within named instrument of mortgage, and all the real estate, with appurtenances therein mentioned and described, to have and to hold the same forever. Subject nevertheless to the equity and right of redemption of the within named *A. Meyer*, his heirs and assigns therein.

In witness whereof the party of the first part has hereunto set his hand and seal this *third* day of *March*, in the year of our Lord eighteen hundred and *eighty-seven*.

Henry Betzold. (SEAL)

Sealed and delivered in the presence of

E. E. Hawthorn.

MORTGAGE DISCHARGE.

Naperville, Ills., March 4, 1887.

I have received full satisfaction of the debt secured by this mortgage, and hereby cancel and discharge the same.

J. A. Blanchard.



THE MAN THAT NEVER PAYS A MORTGAGE.

HOW TO WRITE A CHATTEL MORTGAGE.

Use a legal printed form or write one like the copy given below.

A Chattel Mortgage is a mortgage on personal property, such as live stock, machinery, farm implements, etc.

1. A chattel mortgage must be acknowledged before a Justice of the Peace, or before the County Judge, in which the mortgagor resides.

2. The mortgage must be recorded.

3. Chattel mortgages may not run longer than two years.

4. A chattel mortgage is like a pledge in that the debtor may become entitled to the property by paying the debt; they are unlike in that in a chattel mortgage, if the debt is not paid, the property becomes the creditor's, and the debtor is not entitled to any surplus.

5. A chattel mortgage is a conditional sale of property, if the debt for which it was given is not paid.

6. A pledge is not a sale, it only gives the right to sell to some one else if the debt is not paid.

7. The property must be taken possession of by the mortgagee on the maturity of the mortgage, or it can be taken by other creditors.

8. To sell property covered by a chattel mortgage is a criminal offense.



THE MAN WHO PAYS HIS MORTGAGE AT THE DAY OF MATURITY.

FORM OF CHATTEL MORTGAGE.

KNOW ALL MEN BY THESE PRESENTS, That I, Grace Margaret Nichols, of the town of Naperville, in the County Du Page, and State of Illinois, acknowledge myself to be indebted to A. S. Barnard, of the town of Mendon, County of Monroe, State of New York, the sum of Four Hundred Dollars (\$400.00) with six per cent. interest from date, and for the security of said sum I do hereby mortgage and sell and assign to the said A. S. Barnard, One Bay Mare, 4 years old, One Wagon, One Set of Double Harness and all my Household Furniture of every description in my house on Washington Street in the town of Naperville.

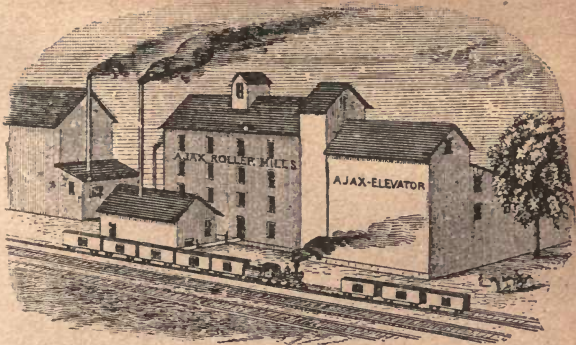
And, I hereby authorize and empower the said A. S. Barnard to take possession of said property and effects, he to sell the same and appropriate the proceeds to the payment of said debt and interest.

Witness my hand and seal this first day of December, 1892.

Grace Margaret Nichols. (SEAL)

Chattel mortgages in South Dakota are not acknowledged, but require two witnesses, and may run three years.

Chattel mortgages in Montana may run one year and sixty days.



HOW TO WRITE A LEASE.

RULE.—*The party granting the possession and profit is called the LESSOR, and the party to whom the grant is made is called the LESSEE.*

A Lease is a contract to be performed by both parties, and hence they both should sign it.

It is proper and best to have two copies of the lease (both alike), so that each party may hold a copy of the original agreement.

Write the lessor's name first, and his name should be signed first at the close.

Payments of rent should be entered on the back of the lease.

Care should be exercised in giving the **TIME, DESCRIPTION** and the **AMOUNT TO BE PAID.**

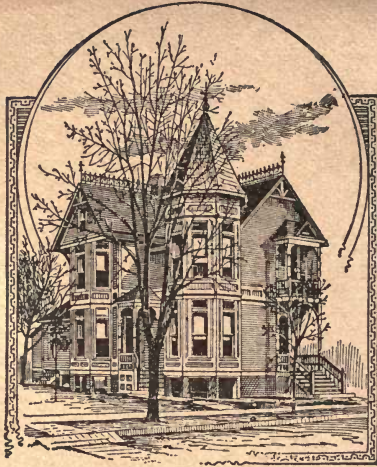
1. A LEASE is a contract by which a party gains the possession, use and profit of lands and tenements, in return for which he pays the owner thereof a recompense, called rent.

2. A lease must always give a less interest in land than that of the lessor. If lessor conveys his whole interest, it is an assignment or deed.

3. A lease of lands and tenements may be by written or verbal contract, except that there cannot be a verbal lease for a longer period than one year.

4. A written lease cannot be changed by verbal agreement made at the same or another time. When parties reduce their agreements to writing they are bound by the writing as against any verbal declarations.

5. If no time is stated when the rent is to be paid, it is not due till the end of the lease.



A Lease for Renting a House.

KNOW ALL MEN BY THESE PRESENTS :

That I have, this sixth day of September, 1891, let and rented unto Andrew Jay my house and premises, number 142 on Archer Street, in the town of Livermore, and State of Iowa, with the sole and uninterrupted use and occupation thereof for one year, to commence the first day of May next, at the monthly rent of twenty dollars, payable in advance.

Witness my hand and seal,

Henry R. Rilling, [Seal.]

SHORT FORM OF LEASE.

John Parks leases to J. B. Moulton (description of premises) for a term of.....upon the payment of.....Dollars.

Dated this 1st day of August, 1891.

J. K. Miller.

A LEASE—FOR CASH RENT.

THIS INDENTURE, made this *Fifth* day of *February*, A.D. 1884, between *Samuel E. Sport*, of the *Town of Naperville*, in the County of *Du Page* and State of *Illinois*, of the one part, and *James R. Giddings*, of the *Town of Lisle*, in the County and State aforesaid, of the other part ;

WITNESSETH, That the said *Samuel E. Sport*, for the consideration hereinafter expressed, hath demised, granted and leased, and doth by these presents hereby demise, grant and lease unto the said *James R. Giddings* and his assigns lots one (1) two (2) and three (3) in block seven (7) of the original *Town of Naperville*, as shown by the plat of said town on file in the Recorder's office of the said *Dupage County*. And also the Northceest quarter (N. W. $\frac{1}{4}$) of Section Eight (8) in Township Twenty (20), Range Nine (9), East of the 3rd Principal Meridian, and containing one hundred and sixty (160) acres according to government survey. All aforesaid real estate being situate in the County of *Du Page* and State of *Illinois*, together with all the privileges and appurtenances thereunto belonging. TO HAVE AND TO HOLD the above described premises for and during the term of five years from the date hereof.

And the said *James R. Giddings* doth covenant and agree to pay the said *Samuel E. Sport*, or his assigns, the sum of *One Thousand Dollars*, as yearly rent for said premises, in 2 equal payments of *Five Hundred Dollars* each, at the expiration of each and every *six* months from date, during the continuance of this Lease.

IN WITNESS WHEREOF, The said parties have to this and one other instrument of the same tenor and date interchangeably set their hands and seals, the day and year first above written.

Signed, Sealed and Delivered
in Presence of

J. H. Nichols.

}

Samuel E. Sport.

(SEAL)

James R. Giddings.

(SEAL)

SECURITY FOR RENT.

For value received I hereby enter myself security for the full payment of the rent reserved in the within lease, and guarantee the payment of the rent and full performance of all covenants contained herein by the said party of the second part.

FRED. A. LUEBEN.

188 AGREEMENT TO CULTIVATE LAND ON SHARES.

THIS AGREEMENT, made this first day of March, one thousand and eight hundred and ninety-one, between H. M. Schrepfer, of the town of Cohoctah, in the County of Livingstone, State of Michigan, party of the first part, and Richard Brown, of the City of La Salle, in the County of La Salle, and State of Illinois, party of the second part.

The party of the second part agrees to cultivate the land in good, workmanlike manner, keep the land free from noxious weeds, haul out the manure, and keep the fences in repair, the party of the first part to furnish the material.

The said Richard Brown is to deliver at the residence of the party of the first part, one-half of all the grain and hay raised on the farm of the party of the first part, and pay \$4.00 per acre for the land which he feeds as pasture.

This Lease to hold good from March 1, 1895, to March 1, 1896.

Witnesses: { *Anna Holverson.*
Olive M. A. Weis.

H. M. Schrepfer.
Richard Brown.





HOW TO WRITE A DEED.

- RULES:**—1. *It must be written or printed on paper or parchment.*
2. *The names of the parties and place of residence are written first.*
3. *The property must be fully described. The description should be by bounds, or by divisions of United States surveys, or by subdivisions into blocks and lots, as shown on the records.*
4. *It must express a consideration, also a covenant to "warrant and defend" and be signed and sealed by the grantor or grantors.*

CAUTION.—It must be completely written before delivery. Numbers should always be written in *words* followed by figures in parentheses. If the grantor is married, they both should join in the grant and in execution of the deed—signing and acknowledging. Where forms are prescribed by the Statutes of a State, they must be followed. The long form, however, is good in all the States.

THE LAW GOVERNING DEEDS.

1. The acknowledgment of a deed can only be made before certain persons authorized to take the same, such as Justices of the Peace, Notaries, Masters in Chancery, Judges and Clerks of the Courts, Commissioners of Deeds, etc.

2. A deed without consideration is void.

3. Any person of legal age, competent to transact business, and owning real estate, may convey it by deed.

4. The deed takes effect upon its delivery to the person authorized to receive it, and should be recorded at once.

5. After the acknowledgment of a deed the parties have no right to make the slightest alteration.

6. The person making the deed is called the *grantor*, the person to whom the deed is delivered is called *grantee*.

7. A WARRANTY DEED.—The grantor warrants the title to be good, and agrees to defend the same against all persons.

A QUIT CLAIM DEED releases only what interest the grantor has in the property.

8. Never purchase real estate without a careful examination of the title, either by yourself or a trusty attorney.

9. Always procure an abstract of title before advancing money or signing contract for purchase of land or lots.

WARRANTY DEED.—Long Form.

THIS INDENTURE, made this *Second day of March*, in the year of our Lord one thousand eight hundred and *eighty-five*, between *Andrew Samson and Polly Ann Samson, his wife*, of the *Village of Naperville*, in the County of *Du Page*, and State of *Illinois*, party of the first part, and *Ebenezer P. Stought* of the *City of Chicago*, in the County of *Cook* and State of *Illinois*, party of the second part :

WITNESSETH, That the said party of the first part, for and in consideration of the sum of *Ten thousand Eight hundred and ninety* (\$10,890.00) Dollars, in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, and the said party of the second part forever released and discharged therefrom, have granted, bargained, sold, remised,

released, conveyed, aliened and confirmed, and by these presents do—grant, bargain, sell, remise, release, convey, alien, and confirm unto the said party of the second part, and to *his* heirs and assigns, forever, all the following described lots, pieces, or parcel of land, situated in the County of *Du Page*, and State of *Illinois*, and known and described as follows, to-wit:

The North-west quarter of Section Thirty-six (36) in Township thirty-eight (38) North, of Range eleven (11) East of the Third Principal Meridian, containing one hundred and sixty acres by Government survey. Also, an equal undivided one-half interest in Lot number one (1) in Block number three (3) of Smith's subdivision of Schuyler's addition to the Village of Naperville, in the County and State aforesaid.

TOGETHER WITH ALL AND SINGULAR the hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues, and profits thereof; and all of the estate, right, title, interest, claim, or demand whatsoever, of the said party of the first part, either in law or in equity, of, in, and to the above bargained premises, with the hereditaments and appurtenances: TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the said party of the second part, his heirs and assigns forever.

And the said *Andrew Samson and Polly Ann Samson, his wife*, party of the first part, for *themselves and their* heirs, executors, and administrators, do covenant, grant, bargain, and agree to and with the said party of the second part, his heirs and assigns, that at the time of the ensealing and delivery of these presents, they are well seized of the premises above conveyed, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in law, in fee simple, and have good right, full power, and lawful authority to grant, bargain, sell and convey the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments, and encumbrances, of what kind or nature soever; and the above bargained premises, in the quiet and peaceable possession of the said party of the second part, *his* heirs and assigns, against all and every other person or persons lawfully claiming or to claim the whole or

any part thereof, the said party of the first part shall and will WARRANT AND DEFEND.

AND the said party of the first part hereby expressly waive and release any and all right, benefit, privilege, advantage and exemption, under or by virtue of any and all Statutes of the State of *Illinois*, providing for the exemption of homesteads from sale on execution or otherwise.

IN WITNESS WHEREOF, the said party of the first part *have* hereunto set *their* hands and seals the day and year first above written.

Signed, Sealed and Delivered in
the Presence of

.....
Salamander S. Stone.

Andrew Samson.

(SEAL)

Polly Ann Samson,

(SEAL)

.....

(SEAL)

.....

(SEAL)



HOW TO WRITE A WILL.

RULE.—Use simple language, and state fully and plainly all the particulars concerning every provision or condition of the will.

THE LAW OF WILLS.

1. All persons of sound mind and memory, of lawful age, freely exercising their own will, may dispose of their property by will. In some States a married woman cannot without consent of her husband.

2. "Lawful age," is in most States 21 years, in both male and female; in many States a female is of lawful age when 18 years old, in some States persons may dispose of personal property by will at the age of 17.

3. No exact form of words is necessary to make a will good at law.

4. The maker of a will if male, is called a *testator*; if female, *testatrix*.

5. A will has no force or effect until after testator's death.

6. The last will annuls all former wills.

7. A wife cannot be deprived of her dower, which is a life interest in one-third of her husband's real estate by will, but in some States taking any interest in her husband's property by virtue of his will, bars her dower.

8. Subsequent marriage by female, revokes will made while single in those States where husband's consent is necessary.

9. Testator's property is primarily liable for testator's debts and funeral expenses, which must be paid before any part of it can be distributed to legatees.

10. A will is good, though written with a lead pencil.

11. A person who is competent to make a will can appoint his own executor. If the person so appointed is legally competent to transact business, the Probate Court will confirm the appointment. The person so appointed is not obliged to serve.

12. It is not necessary that the witnesses should know the contents of the will. It is generally necessary that testator acknowledge to them that it is his will, sign it in their presence, or acknowledge the signature already signed to be his, and request them to sign as witnesses: they should sign as witnesses in the presence of each other.

13. Testator should write his own name in full. If unable to do so, his hand should be guided by another, and his name written, or a mark made near his name.

The following is the usual form where testator signs by mark.

John ^{his} X Smith.
mark.

14. An addition to an executed will is called a codicil.
15. The same essentials apply to a codicil as to a will.
16. Legacies to subscribing witnesses are generally declared void by statute.

THE FORM OF A WILL.

I, John Smith, of the Village of Naperville, County of DuPage, and State of Illinois, being of sound mind and memory, do make, publish and declare this to be my last will and testament, to-wit:

First—All my just debts and funeral expenses shall be first fully paid.

Second—I give, devise and bequeath all the rest, residue and remainder of my estate, both real and personal, to my beloved wife Susie E. Smith, to have to hold to her, my said wife, and to her heirs and assigns forever.

Third—I nominate and appoint my said wife, Susie E. Smith, to be the executor of this my last will and testament, hereby revoking all former wills by me made.

In witness whereof I have hereunto set my hand and seal this 15th day of November, A. D. 1885.

John Smith. (SEAL)

Signed, sealed, published and declared as and for his last will and testament by the above named testator, in our presence, who have, at his request, and in his presence, and in the presence of each other, signed our names as witnesses thereto.

Most States require two witnesses.	{ A. B. C. D. E. F.
Some States require three.	

POWER OF ATTORNEY.

KNOW ALL MEN BY THESE PRESENTS, That I, *James L. Binton*, of the Village of Naperville, County of DuPage and State of Illinois, have made, constituted and appointed, and BY THESE PRESENTS do make, constitute and appoint *Henry J. Lundy* true and lawful Attorney for me and in my name, place and stead, to lease, sell, or make any other disposition whatever

of the following described premises, to-wit: Lots three (3) and four (4) of Block, five (5) in the Town of Honey Grove, County of Beeswax and State of Texas, and to sign, seal and deliver any agreement, assignment, assurance, conveyance or lease to any persons who shall purchase, or agree to purchase, such property, or any part thereof, and in due form of law to acknowledge any such instrument necessary to the proper conveying or leasing said premises, or any part thereof, giving and granting unto my said Attorney full power and authority to do and perform all and every act and thing whatsoever, requisite and necessary to be done in and about the premises, as fully to all intents and purposes, as I might or could do if personally present, with all power of substitution and revocation, hereby ratifying and confirming all that my said Attorney or his substitute shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the 2nd day of *January*, one thousand eight hundred and eighty-six.

Signed, Sealed and Delivered
in Presence of

}

James L. Binton. (SEAL)

To be properly acknowledged before officer, the same as a deed, according to the law of the State.



When you deal with an agent you do business at your own risk.

HOW TO DO BUSINESS WITH AN AGENT.

1. A *general agent* is one authorized to transact all his principal's business, or all his business of some particular kind, or at some particular place.
2. A *special agent* is one authorized to do one or more

special things in pursuance of particular instructions, or within restrictions necessarily implied from the act to be done.

3. If a special agent exceeds his authority, the principal is not bound ; but if a general agent exceeds his authority, the principal is bound, provided the agent acted within the ordinary and usual scope of the business he was authorized to transact, and the party dealing with him did not know he was exceeding his authority.

4. Express authority is given to an agent by what is called a Power of Attorney. If the authority is to execute a writing under seal and acknowledged, the power of attorney must be likewise under seal and acknowledged.

5. The agent's authority may be revoked by the principal at any time.

6. An agent concealing his principal is himself responsible.

7. An agent acting fraudulently or deceitfully is himself responsible to third parties.

8. An agent cannot appoint a substitute, or delegate his authority to another, without the consent of his principal.

9. A man may do through his agent whatever he may lawfully do himself.

Factors, Brokers, Attorneys, etc., are but agents in a business sense.

11. The authority of an agent may be constituted in three ways : By deed under seal, by writing, or by mere words.

12. Persons not of age, married women, and aliens may act as agent for others.

13. A notice to an agent is generally considered notice to the principal.

14. The principal is liable to the third person for the negligence or unskillfulness of the agent, when he is acting in the fulfillment of the agency business.

15. Money paid by an agent can be recovered by the principal, if it has been paid by mistake.

16. An agent to sell land, or to do any important business, he should be appointed by a "*Power of Attorney*."

QUIT-CLAIM DEED.

THIS INDENTURE, made the 18th day of August, in the year of our Lord one thousand eight hundred and ninety-four, BETWEEN Bay Scott and his wife Lizzie E. Scott, of the city of San Francisco, in the State of California, party of the first part, and Timothy H. Barnard, of the town of Chico, county of Butte, in the State of California, the party of the second part, WITNESSETH: That the said party of the first part for and in consideration of the sum of nine thousand (\$9,000) dollars, currency of the United States of America, to us in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, do by these presents remise, release, and forever QUITCLAIM unto the said party of the second part, and to his heirs and assigns forever, all the certain lots, pieces or parcels of land, situated in the said town of Chico, county of Butte, and State of California, and bounded and particularly described as follows, to-wit:

Lot number three (3), in block number six (6), in the town of Chico, and County of Butte, State of California. Also the northwest quarter of section thirty-seven (37), in the town of Chico, County of Butte, and State of California, containing One Hundred and Sixty acres, more or less.

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances, unto the said party of the second part, and to his heirs and assigns forever.

IN WITNESS WHEREOF, the said party of the first part have hereunto set their hand and seal the day and year first above written.

Signed, Sealed and Delivered
in the presence of
KATIE BURKE.
R. O. HALL.

BAY SCOTT, [SEAL.]
LIZZIE SCOTT. [SEAL.]

HOW TO WRITE AFFIDAVITS.

An affidavit is an oath or affirmation made in writing, sworn or affirmed to, before an officer empowered to administer the same.

The following are a few of the forms made in general use.

Common Form.

COMMONWEALTH OF ILLINOIS, HENRY COUNTY, } ss.
ACKLEY, April 4, 1894. }

Then the above named Henry Biller personally appeared and made oath (*or solemnly affirmed,*) that the foregoing declaration, by him subscribed, is true. Before me,

JASPER DILLE,
Justice of the Peace.

Affidavit to Signature of an Absent Witness.

STATE OF IOWA, SHAWNEE COUNTY, } ss.
TOPEKA, May 10, 1894. }

Before me, the subscriber, one of the Justices of the Peace in and for the said County, personally appeared Jacob Armbruster, of full age, who being duly sworn according to law, doth depose and say that he is well acquainted with the hand-writing of Daniel Seitz, one of the subscribing witnesses to the within (*naming the kind of writing*), having frequently seen him write, and that he verily believes that the name of the said Daniel Seitz, signed to the same, as one of the attesting witnesses, is the proper hand-writing of the said Daniel Seitz, who is now absent.

PETER THOMPSON,
Justice of the Peace.



How to Write all Kinds of Guaranties.

1. A GUARANTEE is an assurance made by a second party that a certain party will perform a certain specific act.

2. A guarantee to be binding should be for a consideration.

3. All guarantees must be in writing.

4. A mere accommodation or overture is not sufficient to hold a guarantor.

5. A guarantee must be accepted to make it a contract, and the guarantor must have notice of its acceptance within a reasonable time.

6. A guarantor, after paying the debt, has the right to substitute himself in place of the creditor.

7. Guarantees of commission merchants binding them to warrant the solvency of the purchaser of goods they sell on credit, need not be in writing.

8. The terms of the contract of guaranty are to be strictly construed.

9. In the sale of a horse the purchaser can only hold the guarantor for defects of the horse when sold.

10. In case of a cough the horse must have been heard to cough previous to the purchase. If lame, the lameness must be proved to arise from a cause that could not have occurred after the purchase.

11. A guaranty after the sale of the horse is of no effect.



How to Write a Guaranty for the Purchase of a Horse.

Osage, Kansas, June 30, 1891.

In consideration of One Hundred and Fifty Dollars, for a bay mare, I hereby guarantee her to be only six years old, sound, free from vice and quiet to ride or drive.

N. B. This guaranty embraces every cause of unsoundness that can be detected and the seller will be held for all the defects in the animal at the time of sale. This is the only safe and satisfactory way for a man to purchase a horse who is not an experienced judge of horses.

Another.

Dayton, Aug. 30, 1891.

W. Reinke, Esq.

Dear Sir:—I hereby guarantee the payment of any bill or bills of merchandise, Mr. Jno. A. Dahlem may purchase from you, the amount of this guarantee not to exceed five hundred dollars (\$500), and to expire at the end of three months from date. Respectfully yours,

Chas. Adams.

Guarantee of a Debt Already Incurred.

St. Louis, Mo., July 10, 1891.

Messrs. H. E. Bechtel & Co., West Salem.

Gentlemen:—In consideration of one dollar, paid me by yourselves, the receipt of which I hereby acknowledge, I guarantee that the debt of four hundred dollars now owing to you by Ira J. Ferry, shall be paid at maturity.

Very respectfully yours,

William Metz.



How to Form a Partnership, and the Rules and Law.

1. Partnership is a voluntary contract between two or more persons, to place their property, labor or credit, or some or all of them, in some lawful business, to share the gains and losses in certain proportions.
2. Where no time is specified, any partner may dissolve a partnership at will.
3. The death of any partner dissolves the whole firm.
4. Each partner has full authority to act for the firm.
5. Not only the common property, but also all the private property of each partner may be taken, to satisfy the debts of the firm.
6. Upon the dissolution the old partners are responsible to third persons for even new debts, unless such persons have had notice of the dissolution.
7. One partner may discharge himself from liability by giving express notice to any customer or other person, not to trust one or more of his co-partners.
8. A partner cannot make the firm responsible for his separate or private debt, nor bind the firm by entering into engagements unconnected with, or foreign to the partnership.
9. The contract of co-partnership may be made verbally or in writing. It is a serious engagement and easier to get into than to get out of. Every person should use great care in involving his property and business interests in a co-partnership, and where those interests are extensive, articles of co-partnership drawn by the best qualified lawyer available are the safest expedient, and will in all cases be a good investment.

Agreement to Dissolve a Partnership.

We, the undersigned, do mutually agree that the within mentioned partnership be, and the same is hereby dissolved, except for the purpose of final liquidation and settlement of the business thereof, and upon such settlement wholly to cease and determine.

Witness our hands and seals, this twenty-ninth day of May, eighteen hundred ninety-one.

Signed, Sealed and Delivered in
Presence of

Harvey C. Chester.

Porter L. Fields.

John H. Wagner. (SEAL)

Reuben H. Howard. (SEAL)

ARTICLES OF CO-PARTNERSHIP.

ARTICLES OF AGREEMENT, made December 3d, 1890, between John H. Wagner and Gregory Ross :

The said parties hereby agree to become co-partners, under the firm name of Wagner & Ross, and as such partners to carry on together the business of buying and selling all sorts of dry goods, at No. 547 Fulton street, in the city of Brooklyn.

The said John H. Wagner agrees to contribute two thousand dollars (\$2,000) to the capital of said firm ; and the said Gregory Ross agrees to contribute one thousand dollars (\$1,000) to the same ; the sum of \$2,500 of said capital to be expended in the purchase of a stock in trade.

The said Wagner shall have exclusive charge of all the buying for the firm.

All the net profits arising out of the business shall be divided in the following proportions, two-thirds to the said Wagner and one-third to the said Ross.

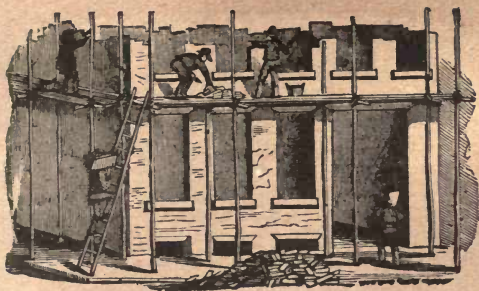
Each partner shall devote all his time, attention, and efforts to the said business.

Neither partner shall, without the consent of the other, sign any bond, bill or note as surety, or otherwise become obligated as security for any other person.

Witness the hands and seals of the parties hereto, this 1st day of January, A. D. 1891.

..... (SEAL)

..... (SEAL)



How to Secure a Mechanic's Lien on Property.

1. A *Lien* is a legal claim. It includes every case in which either real or personal property is charged with any debt or duty. Or in other words, it is the right to hold possession of property until some claim against it has been satisfied.

2. *Possession* is always necessary to create a lien except in case of mortgages. The lien simply extends to the right of holding the property until the debt is satisfied. The property cannot be sold without the consent of the owner, except by order of the Court.

3. *Law*: The existence of a lien does not prevent the party entitled to it from collecting the debt or claim by taking it into Court.

4. Warehouse men, carpenters, tailors, dyers, millers, printers, etc., or any person who performs labor or advances money on property or goods of another has a lien on same until all charges are paid.

5. *Hotel Keepers* have a lien upon the baggage of their guests, whom they have accommodated.

6. *Common Carriers* have a lien on goods carried for transportation charges.

7. *Agents* have a lien on goods of their principal for money advanced.

8. *How to Hold the Lien.* Never give up possession of the property until the debt is paid.

9. *Real Property.* If the debt is on a house, barn or other real property, file a lien on the whole property, and have it recorded in the County Recorder's office. The claim then partakes of the nature of a mortgage.

10. *Mechanic's Lien.* Many of the States have enacted special laws to protect mechanics who furnish materials for buildings which they erect for others. The following form is the one generally used.

Form of Mechanic's Lien.

(To to filed with the Clerk of the County Court.)

Clerk of the County Court,
Austin, Texas.

Sir :—PLEASE TAKE NOTICE, that I, William Chamberlain, residing at 224 Warren Street, Detmore, Texas, have a claim against G. W. Julian amounting to Two Hundred and Twenty (220) Dollars, due me, and that the claim is made for and on account of Carpenter work and materials furnished, and that such work was done and materials were furnished in pursuance of an agreement entered into the 25th of March, 1890. (*Here describe the contract.*) The said building is owned by G. W. Julian, situated in the town of Detmore, on lot 5, block 22, (Smith's addition.)

And that I have, and claim a lien upon said house (or building) and the appurtenances and lot on which said building stands. Subject to the provisions of an act of the Legislature of the State of Texas, to secure the payment of mechanics, laborers, and persons furnishing materials towards the erection, (altering or repairing) of said building.

Dated this 24th day of Nov., 1891.

William Chamberlain.

The above should be sworn to before a Notary, Justice of the Peace, or County Judge, and in some States County Clerk.



How to Settle Difficulties by Arbitration.

Arbitration is an agreement by parties who have a controversy or difference to the decision of a third party.

Arbitration is one of the highest courts for the settlement of personal differences, and if people would only learn more of its benefits and advantages, lawyers by the thousands would not thrive and fatten upon the earnings of those who could make better use of their money.

When the matters in difference are simply those of fact, it is often more satisfactory to submit them to the decision of mutual friends, each contending party choosing one, and the two arbitrators thus chosen choosing the third, and the three parties thus chosen constituting the court.

The decision of the arbitrators is called an *award*.

The award should be specific and distinct containing the decision of the arbitrators in as clear and concise language as possible.

The following oath should be taken by the persons chosen to act as arbitrators or referees before entering upon the examination of the matters in dispute: We, the undersigned arbitrators, appointed by and between Henry Smith and Richard Brown, do swear fairly and faithfully to hear and examine the matters in controversy between said Henry Smith and

Richard Brown, and to make a just award, according to the best of our understanding.

P. D. Crimmins,

J. O. Everett,

O. M. Powers.

Sworn to this 26th day of May, A. D. 1885, before me.

D. B. Giveler,

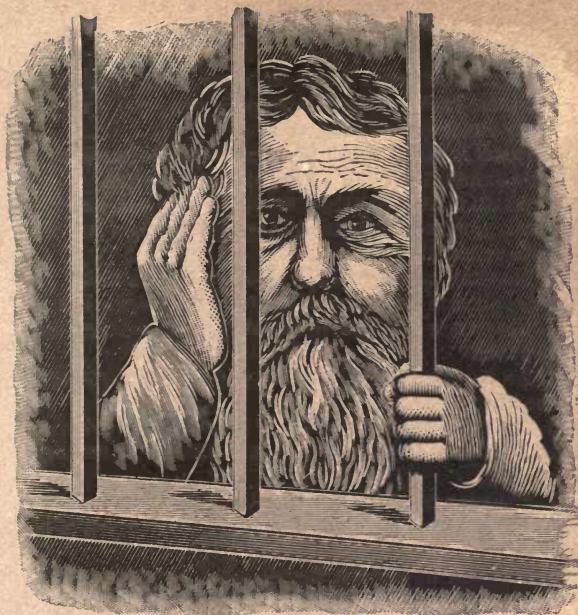
Justice of the Peace.

Oath to be administered to a witness by the arbitrators :
You do solemnly swear, that the evidence you shall give to the arbitrators here present in a certain controversy submitted to them by and between Henry Smith and Richard Brown, shall be the truth, and nothing but the truth, so help you God.

Nations by a system of arbitration are avoiding bloody and protracted wars.

Arbitration Best for Farmers.

Arbitration is almost invariably preferable to litigation. It is not only the easiest, quickest and cheapest way to settle disagreements, but saves much vexation and subsequent dissension. Were individuals, corporations and nations to arrange their disputes by arbitration, instead of resorting to litigation and warfare, the people would be saved millions of treasure, and the world spared much shedding of blood. A peaceful settlement of difficulties is usually followed by prosperity, while "going to law" or war usually results in loss and suffering to both contestants. Indeed, litigation and warfare are twin relics of the dark ages, and so long as they continue in vogue we may look in vain for harbingers of the promised millennium. Of all classes, farmers should, so far as possible, avoid entering into litigation; for whether they win or lose, they are proverbially worsted, the lawyers usually taking the cream, and leaving only the skim-milk for the winning contestant. Truly, there is neither glory nor honor, profit nor pleasure in litigation, and the less people who profess to live "on the square," and, according to the Commandments, have to do therewith, the better it will be for both their present and future peace and prosperity. Even in the most aggravating case of trespass, and the like, no good citizen should resort to the law, until all amicable attempts at settlement have failed. Indeed, and finally, whatever may be the provocation, don't get mad and impulsively prosecute your neighbor, but keep your temper.



“The way of the transgressor is hard.”

TERMS AND FACTS OF CRIMINAL LAW.

1. THE RULE, “Every man’s house is his castle” only applies to civil cases. Any locked door of the house may be forced open to arrest a criminal.

2. EVERY MAN is compelled by law to obey the call of a sheriff for assistance in making an arrest.

3. EMBEZZLEMENT is a fraudulent appropriation to one’s own use what is entrusted to one’s care, and can only be charged against a clerk, servant, or agent.

4. THE OFFENSE OF STEALING cannot be lawfully settled by receiving back stolen property.

5. **BIGAMY** cannot be proven in law if one party to the marriage has been absent and not been heard from in five years.

6. **PETIT LARCENY** is where the value of the property stolen is less than \$25.00. Grand larceny is when the value of the property stolen exceeds \$25.00.

7. **ARSON** is the burning of an inhabited building by night.

8. **DRUNKENNESS** is not a legal excuse for crime.

9. **ASSAULT AND BATTERY** is where a person has inflicted physical violence; an assault however is only an offer or attempt at assault.

10. **MAYHEM** applies to any injury done to a limb. It formerly applied to the injury of the face, lip, tongue, eye, or ear.

11. **FELONY** is a crime punishable by imprisonment in a State prison.

12. **AN ACCIDENT** is not a crime, unless criminal carelessness can be proven.

13. **BURGLARY** is the entering of a house at night or at twilight, or in any darkness where it is difficult to distinguish a man's face.

14. **PERJURY** is false swearing wilfully done. A witness should always qualify his statements as "to the best of my belief" or "as I am informed".

15. **MURDER** in the first degree must be premeditated and malicious, or committed while the murderer is engaged in some felonious act.

16. **DUELS.** Killing a man in a duel is murder, and any person giving or accepting a challenge is guilty of a misdemeanor.

17. A **POLICE OFFICER** cannot arrest a person without a warrant, unless he has personal knowledge of the offense.



When to Sign Your Name in Full.

When you sign deeds, mortgages, wills, contracts involving land or other instruments of a permanent character, always write your name in full. Never use your ordinary business initials for signatures of this kind. In affixing your signature to a note or receipt, it is always better to write your first name out in full. There are sometimes several individuals in a community with the same initials and name, but when the first name is written out in full the names are different and consequently in mail matters, as well as in other things, much confusion is avoided. Therefore, in order to avoid possible errors in public records and confusion of titles, it is always better to sign your name in full. For instance, instead of writing H. A. Smith, write Henry A. Smith.

How a Married Woman Should Sign Her Name.

A married woman doing business for herself and handling her own individual money, had better use her own name instead of her husband's. For example, Mrs. Clark should sign Lucy A. Clark and not Mrs. Henry Clark.

A married woman is always at a disadvantage if she signs at one time her own name and then at another her husband's

name, and it always results in more or less confusion. If she prefers to use her own name, she should always write it that way and not write L. A. Clark, Lucy Clark, or Mrs. Henry Clark, but always write it, Lucy A. Clark.

A married woman in writing a letter to a stranger should always prefix "Mrs." to her name.



How to Secure the Signature of a Person That Cannot Write.

1. The signature of a person who cannot write should always be witnessed. Have the person who witnesses the signature sign his name at the left.

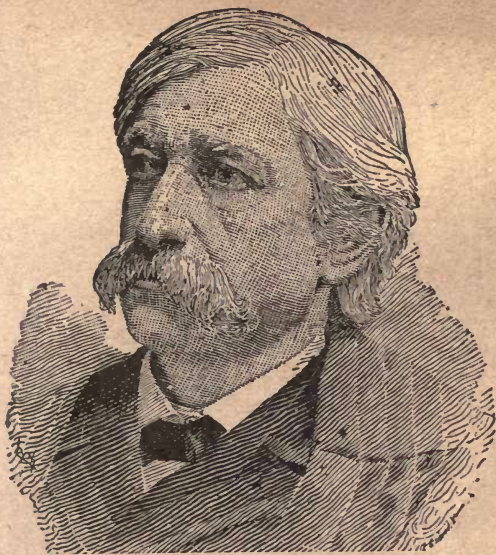
2. Use the following form:

his
Frederick X Miller.
mark

Witness, Mattie Smith.

This signature will apply to all forms of business papers, such as notes, receipts, deeds, leases, etc.

his
Henry X Moore
mark



MELVILLE M. FULLER, CHIEF JUSTICE OF THE U. S.

Legal Holidays in the United States.

January 1, New Year's Day, is a legal Holiday in all the States, except Arkansas, Delaware, Georgia, Kentucky, Maine, Massachusetts, New Hampshire, Rhode Island, North Carolina and South Carolina.

January 8, the anniversary of the Battle of New Orleans; **February 12**, the anniversary of the birth of Abraham Lincoln; and **March 4**, the firemen's anniversary, are legal holidays in Louisiana.

February 22, Washington's Birthday, is a legal holiday in all States except Alabama, Arkansas, Florida, Indiana, Iowa, Kansas, Maine, Missouri, North Carolina, Ohio, Oregon, Tennessee and Texas.

March 2, the anniversary of the independence of Texas, and **April 21**, the anniversary of the Battle of San Jacinto, are legal holidays in Texas.

April 26, Memorial Day, is a legal holiday in Georgia.

Good Friday is a legal holiday in Florida, Louisiana, Minnesota and Pennsylvania.

Shrove Tuesday is a legal holiday in Louisiana, and in the cities of Mobile, Montgomery and Selma, Alabama.

May 30, Decoration Day, is a legal holiday in Colorado, Connecticut, Maine, Michigan, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Dist. of Columbia and Illinois.

July 4, Independence Day, is a legal holiday in all the States and Territories. **Thanksgiving Day**, and public fast days, appointed by the President, are legal holidays in such States as may set them apart for religious observance by the proclamation of the Governor.

Days appointed for general elections, State or National, are legal holidays in California, Maine, Missouri, New Jersey, New York, Oregon, South Carolina and Wisconsin.

December 25, Christmas Day, is a legal holiday in all the States and Territories.



WRITING THE EARLY LAW RECORD.

WORKING ON HOLIDAYS.

There is no law which says a farm hand or any other laborer shall not work on holidays. Generally the laborer should work on such days if required to do so, or forfeit his right to pay. In many localities it is customary not to work on some of the principal days, such as Christmas, Thanksgiving-day in the East, and the Fourth of July, and still to pay the men their regular wages. If this custom is common and well known in any place, it will probably govern, so that pay can be collected although the work is not done. Of course, ordinary farm chores should be done, as on Sundays, at least.



"PLEDGES AND PROMISES ARE CHEAP BEFORE MARRIAGE."

DIVORCE LAWS OF ALL THE STATES.

Adultery, in all the States and Territories, excepting South Carolina, which has no divorce laws.

Impotency, in all excepting Arizona, California, Connecticut, the Dakotas, Idaho, Iowa, Louisiana, New Mexico, New York, South Carolina, Texas and Vermont.

Wilful abandonment or desertion, in all except New York, North Carolina and South Carolina. Period: Six months, in Arizona; one year, in Arkansas, California, Colorado, the Dakotas, Florida, Idaho, Kansas, Kentucky, Louisiana, Missouri, Montana, Nevada, Oregon, Utah, Washington, Wisconsin and Wyoming; two years, in Alabama, District of Columbia, Illinois, Indiana, Iowa, Michigan, Mississippi, Nebraska, Pennsylvania and Tennessee; three years, in Connecticut, Delaware, Georgia, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ohio, Texas, Vermont and West Virginia; five years, in Rhode Island, or shorter term (in discretion of court), and Virginia.

Habitual drunkenness, in all except Maryland, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Texas, Vermont, Virginia and West Virginia. In Arizona divorce is granted for this cause to the wife only.

Cruelty, inhuman treatment, etc., in all except Maryland, New Jersey, New York, North Carolina, South Carolina, Virginia and West Virginia. In Alabama, Kentucky and Tennessee divorce is granted for this cause to the wife only.

Conviction of felony or infamous crime, sentence to imprisonment, imprisonment, in all except the District of Columbia, Florida, Maine, New Jersey, New Mexico, New York, North Carolina and South Carolina.

Failure or neglect of husband to provide for wife. Period: Six months, Arizona; one year, California, Colorado, Dakota, Idaho, Nevada and Wyoming; two years, Indiana; three years, Delaware and New Hampshire; time not specified, Maine, Massachusetts, Michigan, Nebraska, New Mexico, Rhode Island, Tennessee, Utah, Vermont, Washington and Wisconsin (in discretion of court).

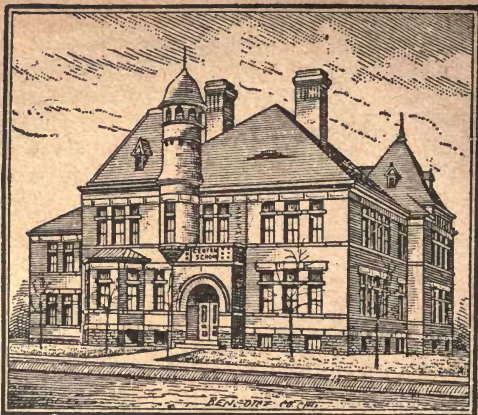
Disappearance, absence without being heard from, Connecticut and Vermont, seven years; New Hampshire, three years; Rhode Island.

Other causes are as follows: Voluntary separation, Kentucky and Wisconsin; having former wife or husband living, Arkansas, Colorado, District of Columbia, Florida, Illinois, Kansas, Mississippi, Missouri, Montana, New Jersey, Ohio, Pennsylvania and Tennessee; joining a religious sect which believes marriage unlawful, Kentucky, Massachusetts and New Hampshire; indicted for felony and is a fugitive from justice, Louisiana and Virginia; husband indicted for felony and flees the State, North Carolina; refusal of wife to "remove with her husband to this State," Tennessee; indignities rendering condition intolerable or life burdensome, Arkansas, Missouri, Oregon, Pennsylvania, Tennessee, Washington and Wyoming; conduct rendering it unsafe for wife to live with husband, Tennessee; turning wife out of doors, Tennessee; habitually violent and ungovernable temper, Florida; attempt by either party upon life of other, Illinois, Louisiana and Tennessee; gross neglect of duty, Kansas and Ohio; wife "given to intoxication," Wisconsin; husband a vagrant under the statutes, Missouri and Wyoming; insanity or mental incapacity at time

of marriage, District of Columbia, Georgia and Mississippi; insanity, permanent and incurable, occurring subsequent to marriage, Arkansas; incurable chronic mania or dementia, having existed ten years or more, Washington; any cause rendering the marriage originally void, Maryland and Rhode Island; or voidable, Rhode Island; marriage within prohibited degrees, Florida, Georgia, Mississippi, New Jersey and Pennsylvania; marriage by force, duress or fraud, Connecticut, Georgia, Kansas, Kentucky, Ohio, Pennsylvania and Washington; marriage solemnized while either party was under the age of consent, Delaware; when one of the parties has obtained a divorce in another State, Florida, Michigan and Ohio; public defamation, Louisiana; any other cause deemed by the court sufficient and when the court shall be satisfied that the parties can no longer live together, Washington.

PREVIOUS RESIDENCE REQUIRED.

Five years, Massachusetts (if when married both parties were residents, three years); three years, Connecticut, New Jersey; two years, District of Columbia, Florida, Indiana, Maryland, Michigan (when the cause for divorce occurred out of the State, otherwise one year), North Carolina, Tennessee, Vermont; one year, Alabama (abandonment, three years), Arkansas (if cause occurred out of the State, plaintiff must have been a resident of the State at time of occurrence), Colorado, (unless cause for divorce occurred within the State, or while one or both of the parties resided in the State); Illinois (same as Colorado) Iowa, Kansas, Kentucky (if cause occurred out of the State, plaintiff must have been a resident of the State at time of occurrence), Maine, Minnesota, Mississippi (in case of desertion, two years); Missouri (same as Colorado), Montana, New Hampshire, Ohio, Oregon, Pennsylvania, Rhode Island, Utah, Virginia, Washington, West Virginia, Wisconsin; six months, Arizona, California, Idaho, Nebraska, Nevada, New Mexico, Texas, Wyoming; ninety days, the Dakotas.



THE LAWS GOVERNING OUR COMMON AND PUBLIC SCHOOLS.

Facts Which Every Teacher and Parent Should Know.

1. **TEACHERS.** It will be found that in all the States the authority to employ teachers is conferred upon officers known as directors, trustees, or committees.

2. The contract made by such school officers with a person to teach in a public school in the district for a period extending beyond the trustees' term of office is valid and binding on his successors in office.

3. A person under age possessing the requisite qualifications may with the consent of his parent or guardian contract to teach school.

4. At common law married women are disabled from making such contracts, but most of the States have removed this disability and she can now contract the same as an unmarried woman.

5. **CERTIFICATE.** Every teacher must have a certificate of mental and moral qualifications properly signed by the examining officer.

If, however, the teacher has obtained a certificate without fraud, although the certificate was issued without any examination having been made, still it is held that the certificate is

good and that the teacher can hold the directors responsible for his salary.

6. Should a person be employed to teach school without a proper certificate he cannot be restrained by the superintendent, but any citizen or resident of the district can make a complaint and secure the removal of such a teacher.

Conditions of School Contracts.

1. It is always best to have a written contract properly signed between teacher and officers.

2. A person hired to perform the duties of a teacher cannot substitute a proxy, no matter how competent, without the consent of the trustees or directors.

3. The trustees of any school district have no right to dismiss any teacher holding a proper certificate, without good and sufficient cause. If the teacher is not faithful, or incompetent, or cannot properly govern the school, these or any one of these deficiencies shall be a sufficient cause for dismissal.

4. If a teacher is dismissed without sufficient cause, full compensation for the time hired can be collected. The teacher must present himself and show willingness to go on with the school in order to show sufficient evidence that he is ready to faithfully perform his part of the contract.

If directors wantonly obstruct him in the discharge of his duties, or dispossess him of the school-house, they will be individually liable for damages.

5. **SWEEPING THE SCHOOL-HOUSE.** A contract to teach school does not imply that the teacher is to sweep out, build fires, or perform other janitorial work. He is not compelled to do so unless it is specified in the contract or agreement.

6. **A CALENDAR MONTH.** The word month has various meanings. There are calendar months, solar months, and several kinds of lunar months.

In law the word month means either a calendar or lunar month. The calendar months are the months as adjusted in the Gregorian calendar and known as January, February, March, etc.

A lunar month is the period of one synodical revolution of the moon, and its length is 29 days, 12 hours, 44 minutes and 2.87 seconds, but in common usage four weeks are called a lunar month.

In making a contract it is always best to specify the kind of month to be taught. If there is no mention of the term month in the contract, then the teacher will be compelled to teach calendar months.

7. CLOSING SCHOOL. If the district officers close the school on account of the prevalence of scarlet fever, small-pox, or on account of any other contagious disease, and the teacher continues ready to perform his contract, he is entitled to full wages during such a period.



OLD TIME SCHOOL

Corporal Punishment.

1. Let it be remembered by parents that children well governed at home rarely, if ever, have any difficulty with teachers in the school-room. The sacred duty to be performed by every parent is to teach his child to be respectful to his teacher and obedient to the rules of school.

2. There would be no success in the management of a school if the teacher were not armed with some coercive power, and the law universally recognizes the fact that the school-teacher stands in the place of the parent, in relation to the pupils committed to his charge, while they are under his care. He therefore can enforce obedience to his commands, lawfully given in his capacity as a schoolmaster, and he may enforce them by a moderate correction.

3. A good school means good order and the authority to keep it so, therefore the teacher has undoubtedly the right to chastise his pupils for any conduct which interferes with the order and discipline of the school.

4. If the teacher in punishing a child administers more than reasonable punishment, he becomes criminally liable.

5. A teacher must punish a child without any ill-will, vindictive feeling, hatred or malice. The punishment must be done when necessary, and in the proper spirit.

6. The teacher must exercise a reasonable degree of discretion, and must temper the punishment according to the nature of the offense, at the same time taking into consideration age, size, and apparent powers of endurance of the child and the teacher must always remember that the jury must say whether the punishment is excessive and unjust.

7. Malice on the part of the teacher may be proven or may be presumed from the circumstances under which the punishment took place.

8. A teacher in order to conduct a successful school must command obedience, and control stubbornness in order to quicken diligence and reform bad habits. In order to enable the teacher to exercise this salutary sway, he must be armed with a power to administer moderate correction when he shall believe it to be just and necessary.

9. The teacher is a substitute of the parent and he is responsible for the successful management of the school for which he is hired to teach, and the law has therefore not undertaken to prescribe punishments for particular offenses, but has contented itself with the general grant of power of moderate correction, and has confided the graduation of punishments to the discretion and judgment of the teacher.

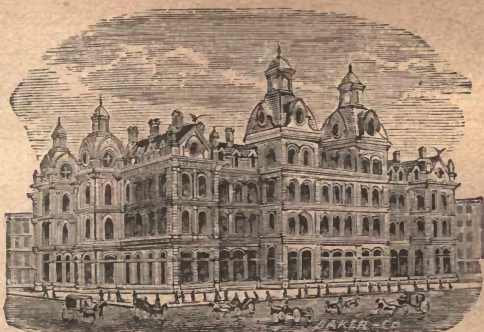
10. Any punishment therefore which may seriously endanger life, limbs, or health, or disfigure the child, or cause any permanent injury, may be pronounced immoderate, and the teacher will be liable for criminal prosecution; but any correction, however severe, which produces temporary pain only and no permanent ill, cannot be pronounced immoderate punishment. The law therefore is that the teacher exceeds the limits of his authority when he causes lasting mischief, though he acts within the limits of his authority.

11. Many severe cases of discipline may better be referred to the board of school directors, but teachers are often compelled to act promptly in order to maintain order.

12. It is always best before expelling a pupil from school to consult the board and place the facts plainly before them and allow them to act for the teacher. An incorrigible child at school can work great mischief, and where parents are in sympathy with a disobedient child the best thing that can be done is to dismiss such a pupil from school.

13. How many men and women are there to-day who have made life a failure; who owe their present condition in life to the fact that their parents always took their part in every matter of disobedience when they were attending school, and the writer personally knows of several young men who have spent several years between the stone walls and behind iron bars of penitentiaries, and these unfortunate young men owe their condition in life to the fact that they were not properly governed at home, and were not allowed to be governed properly at school.

Parents, have the respect and obedience of your children at home, and their school life will not only be pleasant but it will prepare them for a life of usefulness and success.



NEW YORK STOCK EXCHANGE.

BOARDS OF TRADE AND STOCK EXCHANGES.

Boards of Trade and Stock Exchanges were originally organized to facilitate trade in the various commercial interests of the country; but unfortunately instead of blessing and benefiting mankind they have become gigantic engines of robbery and oppression. Members are elected by ballot and the admission fees vary in different organizations from nothing to \$3,000.00.

Dealing in Futures.

This is simply a "high-toned" form of gambling, or in other words a system of "marked guessing" in which the best guesser wins. The game, like all other popular gambling games, is exceedingly simple. You simply bet on the market if it goes up or down, you win or lose just as you have staked your money.

Margins.

Margins are sums of money put up as a forfeit to secure the winner. When the margin is exhausted so that further loss is not guaranteed, it is the custom to close the trade and the winner "rakes in the pot" using the gambler's way of putting it.

Option Trading.

"Seller's option" gives the person selling the privilege of making delivery at any time before the expiration of the contract by giving one day's notice. "Buyer's option" gives the

purchaser a claim for delivery at any time before the maturity of the contract.

Corners.

Thousands of bushels of grains are bought and sold for every bushel brought into the elevators. Chicago Board of Trade sells every day as much wheat as the State of Illinois harvests in a year. It can then be easily seen how "commerce" can be forced. In a Board of Trade each buyer buys upon the supposition that each seller is selling what he has not got, and the buyer is buying what he does not want. Now it is easy for a set of men with an unlimited amount of money to combine and "corner" any article in the market. It simply consists of buying more than can be delivered, and then making the sellers deliver or forfeit their margins. A "bull" is one who operates to raise the market—so called from the nature of the bull to toss with his horn. A "bear" is one who tries to lower the market, so called from the nature of the bear to tear down with his claws. A "lame-duck" is a member unable to fulfill his contracts, and is therefore expelled.

Bucket Shops.

These are Boards of Trade and Stock Exchanges for the boys and poor clerks, generally kept by a broken down broker who lost all his self-respect with his fortune. Here the poorest can try his luck in betting upon the markets. These shops are not reliable; they doctor the markets with false figures and deceive and take in whoever falls into their power. They are demoralizing gambling dens and in no way can they be safely trusted.

Preferred Stock.

This kind of stock takes preference of the ordinary stock of a corporation, and the holders are entitled to a stated per cent. annually out of the net earning before a dividend can be declared on the common stock. Preferred stocks are generally the result of reorganization, although sometimes issued in payment of floating or unsecured debts.

How Stock is Watered.

Sometimes the charter of a corporation forbids the declaring of a dividend exceeding a certain per cent. of the par value of its stock. In this case the directors may find it desirable to “water” the stock—that is, issue additional shares. This increase in the number of shares of course reduces the percentage of dividend, although the same profit in the aggregate is secured to the stockholders.

HOW TO DETECT



COUNTERFEIT MONEY.

1. A COUNTERFEIT is a fac-simile of the genuine, or made as nearly like it as possible. A spurious note is different in design from the genuine and is calculated to pass where the genuine is not much known. An altered note is one altered from a lower to a higher denomination. Piecing is done by making ten notes or bills out of nine, by cutting a counterfeit note into ten pieces.

2. There are two silk threads through the bill lengthwise, one near the top and one near the bottom. By holding it up to the light you can easily see the threads in each bill. This is one of the best tests of a genuine bill, because no counter-

feiter can put in the silk threads and imitate the genuine bill in that respect.

3. See that the portraits are good, and notice that the pupil and the white of the eye show distinctly. Then see that the sky and water are clearly transparent. In counterfeit notes the pictures are always poor and the sky, water, etc., looks scratchy and irregular.

4. The ink used in genuine notes is very difficult to imitate. It gives a clear, glossy expression, while counterfeiter's ink looks dull, smutty and muddy.

5. The paper of a counterfeit is always of an inferior quality, while the government has the best and most perfect system of manufacturing the highest grade of paper.

6. Examine the medallion rulings and circular ornaments around the figures with a microscope, and see if they are regular and in all parts mathematically exact. This is done by a machine that costs from \$75,000 to \$150,000, and consequently is beyond the reach of counterfeiters. Engravings by hand can never imitate this work. These medallion lines, or rulings, can be traced by means of a line through the figures, never breaking or losing itself in another line. In counterfeits it is always broken and irregular.

8. Notes are altered by raising the denomination by taking out the genuine with acid and printing in a higher denomination with a counterfeit die. They can be easily detected by the stain which the acid produces with which the figures are taken out.

8. NEVER BE IN A HURRY IN TAKING MONEY. Look at it carefully, and never hand a bill of large denomination to a showman, especially at the tent of these traveling circuses or at the door of cheap theaters. If they have counterfeit money they will not hesitate to mix it up in the change they return to you.



THE CLEARING-HOUSE SYSTEM.

Almost every business and professional man in the country keeps all the money which he does not need for casual personal expenses on deposit in a bank; he pays nearly all his bills by means of checks; and consequently he receives payments for the most part in checks drawn by those who owed him; he does not, on receiving a check, go or send to the bank to procure the money, but deposits it to his credit in his own bank; and there are many banks in every large city.

Now a wholesale merchant may receive each day a large number of checks, some on one bank, some on another. Of course his own bank, in which he deposits these checks, properly endorsed, desires to collect the money upon them at once, because its profits are made by lending at interest the money entrusted to it by depositors.

But in a city where there are twenty or forty or more banks, it would be a great waste of time and labor, besides

being hazardous, for each one to send around a messenger to each bank to collect what is due. To avoid this the clearing-house has been devised.

At a certain hour on every business day a messenger from each bank goes to "the clearing," carrying all the checks against any and every other bank in the city taken during the previous twenty-four hours. The checks are made up into separate packages, and each has a statement of the aggregate amount due from the bank.

All the rest is a mere matter of addition and subtraction, which is done by the clearing-house clerks. The First National Bank has brought in checks against other banks to the amount of fifty thousand dollars; other banks have brought in checks against the First National to the amount of fifty-one thousand dollars. Then the First National is debtor to the clearing-house in the sum of one thousand dollars.

Other banks are creditors. Of course the debts and credits balance each other to a cent. The debtor banks must immediately pay, in money, whatever they each owe to the clearing-house; the whole sum is at once divided among the creditor banks, and the "clearing" is over.

Thus the claims by each bank against every other bank in the city have been adjusted at very little expense of time and labor, and with the use of a small amount of actual money. The checks and drafts settled are called "exchanges," and the money necessary to complete the settlement is the "balance."

In good years the exchanges at the New York clearing-house reach nearly forty thousand million dollars a year, or about one hundred and twenty-five millions on every bank day. These vast accounts are settled by the shifting about, from day to day, of not more than ten million dollars.

This shows what an immense saving in the use of money the clearing-house makes. The principle is applied to other things beside banking. At New York and also at Boston the brokers have a stock clearing-house. Certificates of stock take the place of checks. The broker who has bought five thousand shares and sold four thousand of "North-west" receives one thousand shares from the clearing-house and pays the money balance due on all his transactions.

But although the clearing-house principle is capable of wide application, it is chiefly employed in the bankers' clearing-houses of this country to the number of about sixty in the chief cities from Maine to Washington.



Teaching Wives and Daughters the Ways of Business.

Women are too frequently ridiculed because of their ignorance of business matters. How can they understand business and business methods, if they have never had an opportunity to learn and transact business? Every husband should teach his wife some of the more important ways of business. He should interest her in his financial affairs, and show her some of the business forms and business documents which form a part of his business transactions. It is a great advantage for a wife to be familiar with her husband's business, as she is liable to be called upon at any time to settle his estate.

How many burdens are annually thrust upon widows, and at what a disadvantage they are in managing the business affairs of the family! Then why not make the path straighter and smoother by beginning now, by teaching your wives and daughters practical business methods?

For family instruction we would suggest the following rules

1. *Assist your wife or daughter in drawing up notes, and teach her not only the correct form, but give her some of the laws bearing upon the legal relations of both debtor and creditor.*
2. *Make various endorsements upon the notes which have been thus written for copy. Write a note for each endorsement and explain it. This is a very easy and simple lesson and can be mastered in a very few evenings.*

3. *Teach the forms of receipts. Write receipts for rent, for money paid on account, for money to be paid a third party, etc. This will be found a very interesting exercise.*

4. *Checks and drafts will form the same interesting exercise.*

5. *The next step will be to secure a few blank forms of notes, checks, drafts, deeds, leases, etc., and any husband will be surprised what progress his wife will make in a few lessons in filling out these business documents.*

5. *If you carry out this plan your wife or daughter will become interested in your business, and will understand the different forms of paper and will soon be able to give you considerable assistance as well as safe counsel.*



How to Teach Business to Children.

Give your sons and daughters some familiarity with the customs of the business world. Let them learn while young how to transact the ordinary forms of business. It is probably best to give them opportunities for earning a little money and try and teach them its value in disposing of same.

It is best to buy them a little account book, and make them have an account of all the money they receive, and the disposi-

tion they make of it. Teach them how to make such entries, and always insist upon their keeping a correct record of all the money they receive, and to give an account of the money they pay out, and always show a correct itemized account.

In this way they may receive a degree of benefit which will insure their business success during life. This learned early in life will always produce an abiding and substantial benefit, and no doubt give birth to many practical ideas of business.



*My son, you shall have a home while I live. But I cannot deed you my farm.
It is all I have to support me in my old age.*

Do Not Give Away Your Property in Old Age.

Many persons, as they advance in years, make the fatal mistake of giving away their property to children and then depend upon them for support.

How many old persons have gone to their graves broken-hearted and suffering for the necessities of life, because they desired to help their children, and gave to them their property.

If the weight of years become heavy and there is plenty of property, a portion may be safely divided among the children, but the major portion should always be held and controlled directly or indirectly by the old couple.

1. It will insure good care and plenty of the necessities of life.

2. The devotion and love of children will never grow cold while there is something in store for them.

It was the writer's experience in his boyhood to board in a family where the father in his old age had bequeathed his entire property to his children. When the same was divided between them their aged father became a burden, and he was sent from daughter to son, as they had all obligated themselves to care in turn for their aged father. But he never entered the home of a son or daughter, where he was a welcome guest. In the family, where the writer boarded, where the aged father was then, if there was a cup of coffee short in the morning, it was the old man's cup that was not filled; if meat or other food was short, it was the old man's plate that indicted the shortage; if the pie was somewhat deficient, it was the old man's piece that was cut in two, and he was compelled to sleep in a cold garret at night alone and deserted, and when the broken-hearted old man passed away, no doubt every child felt delight instead of sorrow in their hearts.

A man may have a farm or factory, or houses, and it may be necessary owing to his age to shift the burdens and cares of business to younger shoulders; the ownership, however, should never be changed, but the running and looking after the property may be delegated to some child or disinterested party.

A competent lawyer is always prepared to do such business.

Every man should make a will in favor of his wife, so that in her old age she shall not become dependent.

Corporations and Stock Investment Explained.

1. An incorporated company is an association authorized by law to transact business. It is a fictitious person that can sue or be sued.

2. Stocks are divided into several parts called shares, and the owners of the shares are called stockholders.

3. Certificates of stock are written statements specifying the number and value of the shares to which their holders are entitled. They are often called scrip.

4. The par value of the stock is the sum named on the face of the scrip, and is thence called its nominal value; the market value is the sum for which it sells. When shares sell for their nominal value, they are at par; when they sell for more they are above par, or at a premium; when they sell for less, they are below par, or at a discount.

5. The gross earnings of a company are its entire receipts; the net earnings are the sums left after deducting all expenses.

6. Installments are portions of the capital paid by the stockholders from time to time. Dividends are portions of the earnings distributed among the stockholders. They are usually paid at stated periods; as annually, etc.

7. A corporation differs from a partnership in two particular ways. First, it cannot exist except by authority of State or national Legislature. Second, the private property of the stockholders cannot be taken for the debts of the corporation, unless the statutes of the State so declared when the charter was granted.

8. In many of the States general acts of incorporation are passed under which companies may organize, without the necessity of special legislation in each case.

9. Great care and good judgment should be used in the purchase of shares of stock, for bad management, dishonesty and contention have ruined many prosperous corporations and stock companies.

FORM OF CERTIFICATE OF STOCK.

No. 275.

200 Shares.

SCRANTON BUTTER COMPANY



OF SCRANTON.

PENNSYLVANIA.

Shares \$50 Each.

This Certifies, that..... Robert Barnard is entitled to..... Two Hundred Shares in the Capital Stock of the

SCRANTON BUTTER COMPANY,

Transferable only on the books of the Company, in person or by Attorney, upon the surrender of this Certificate.

In witness whereof, the Seal of said Company is hereunto affixed.

(Seal.)

SCRANTON, July 2d, 1891.

Henry S. Smith, Treas.

J. A. Hertel, Pres't.

Dr. J. Norton, Cr. Dr. Sing Lee, Cr.

1 To Mdse.,	5 75	2 By Draft,	19 50	3 To Rice,	5 1	4 By Wash-	5 50
" Cash,	30 25	" Labor,	5	5 Opium,	1 25	" ing,	12 1
2 " do	9	4 " Goods,	10 65	6 Leeks,	2 3	Thet,	17 3
" Note,	20 50	6 " Order,	15	7 " Soap,	1 6	Deceit,	40 4
3 " "							16
4 " "							99
5 " "							17 6
6 " "							54
7 " "							25
8 " "							10
9 " "							1
10 " "							4
11 " "							45
12 " "							18 15
13 " "							20 9
14 " "							—
15 " "							99 99
16 " "							—

Book-Keeping.

Int. Cash,	1 10	7 Sunds.,	2 35	8 Acid,	2 4c	8 Conceit,	18 15
" "	12 5	8 Check,	7 90	9 Potash,	95	9 Bal. due,	20 9
	—		—		—		—
	89 50		89 50		99 99		99 99

HOW TO LEARN BOOK-KEEPING.

1. **Mathematics.**—Book-keeping is purely a branch of mathematics, and everyone should be familiar with the rules and principles of common arithmetic.

2. **Ignorance.**—It is lamentably true that people do business all their lives, settle accounts and transact various kinds of business, and never know anything about the first principles of book-keeping. They settle all their accounts according to somebody else's book-keeping. There is no excuse for the younger generation to be ignorant of the principles of book-keeping. It is easily acquired and may be self-taught if a young man or woman has any degree of perseverance.

3. **How to Learn.**—If you cannot get book-keeping in the common or public school, procure some primary work on book-keeping and devote your evenings to study, and you will be surprised at your progress. You can easily, if necessary, secure the assistance of someone that is familiar with the subject. But this will be scarcely needed, as the subject of book-keeping is simple as well as interesting.

4. **Necessity for Book-Keeping.**—The particular necessity for book-keeping is to preserve a record of such exchanges as would otherwise be trusted to memory; although its ultimate purpose embraces other important results. Book-keeping is nothing more nor less than a history of business; a record of business transactions.

5. **A Successful Man.**—A man who is successful in business invariably keeps a correct record of his transactions. He does not depend upon the merchant or lumberman with whom he deals, but he has all his own records correctly kept and by that means proves every account of those with whom he deals. Keep your own accounts; do your own figuring and never trust to the accounts or figures of others. It is the only sure road to success.

RULES FOR BOOK-KEEPING.

1. **The Law of Debit and Credit.**—The first thing that a student must learn in book-keeping is the law of Debit and Credit. Debit and Credit are terms used to express the relation which exist between persons or commodities that enter into any business transaction. The simplest meaning of debit, *is to charge*, and of credit, *is to trust*.

2. **Cash.**—Cash is a title used to designate money. We include under it currency, bank checks, sight drafts, postal orders, etc.

3. **Merchandise.**—Merchandise includes all goods and wares dealt in by the concern as a business, and which are in store or stock.

4. **Bills Payable.**—Bills Payable are our notes or written obligations which others hold, for which we are to pay a certain amount when due. If you give your note it is a *Bills Payable*.

5. **Bills Receivable.**—Bills Receivable are other persons' notes or written obligations, which we hold, for which we are to receive a specified sum when due.

6. **To what the Term Debit and Credit Applies.**—The following list comprises all the conditions to which the term debit and credit apply:

DEBITS.

1. Cash received.
2. Others' notes received.
3. Our notes paid.
4. What others owe us.
5. Capital withdrawn.
6. Outlay or loss.

CREDITS.

1. Cash paid.
2. Others' notes disposed of.
3. Our notes issued.
4. What we owe others.
5. Capital invested.
6. Returns or gain.

7. **Debit and Credit Side.**—When anything is received or bought, it is always placed on the left hand or debtor side; when money is paid or anything sold, the amount is always placed on the right hand or credit side of the account. If a man buys goods on credit, you charge him, and he then is a debtor. When he pays the amount, he then is credited in the books.

8. **The Day-Book.**—The Day-Book affords a regular daily history of the business. The Day-Book simply states what has been done and is called in law the Original Book of Entry. The form of the Day-Book is simple and direct, first giving the name of the person to be debited or credited with the fact of "Dr." or "Cr.," and next, the detail of the purchase, sale or payment, with the final extension of the amount in the proper column.

9. **The Ledger.**—The Ledger is simply a classification of accounts. It places all the accounts together that belong under the same heading. (See Ledger.)

10. **Posting.**—The student will first copy the Day-Book with much care, then post the items to the Ledger—indicating in the margin of the Day-Book the page or number of the account in the Ledger, as shown in the written-up set;—next construct a Day-Book and Ledger of your own from material thus selected, and you will soon master the subject of book-keeping.



How to Detect Errors in a Trial Balance.

No rule or set of rules can be given for *the certain* detection of all errors in a Trial Balance, save a careful review of the entire work. If the errors are few the following rules may be of service :

1. If the error be exactly \$1, \$100, \$1000, etc., the mistake is very likely to be found in the additions either in the Ledger accounts or in the Trial Balance.
2. If the error is a large amount, see that all the amounts have been entered in the Trial Balance.
3. If an amount has been omitted in posting, the Trial Balance will be just that amount of Balance. Look for that amount in Journal or other books.
4. The Cash Balance can never be on the credit side. The balance of Bills Receivable should never be on the credit side, nor the balance of Bills Payable on the debit side of the account.
5. If the amount has been posted on the wrong side of the Ledger the Trial Balance will be just twice that amount out of balance. Look for half that amount through the books.
6. If the error is divisible by 9, it is very likely that the mistake was made by a transposition of figures as, 345 posted 453 makes an error of 108, which is divisible by 9, again 753 posted 735 makes an error of 18, also divisible by 9. Errors of transposition are the most difficult to find.
7. If the error is in the dollar column or cents column only, the columns on the left need not be re-added.
8. If the above rules fail, only a careful review of the entire work, checking each entry, will determine where the mistake has been made.

This Set is Written Up in the following Pages.

July 1.—Commenced business with the following resources: Cash \$1000; Merchandise \$500.—Total investment \$1500.

July 2.—Sold A. C. Knox, on $\frac{a}{c}$, 5 bbls. Flour @ \$5.—Sold Frank Fisher 25 lbs. Coffee, @ 20¢; 15 lbs. Oolong Tea, @ 80¢. Received cash on $\frac{a}{c}$ \$10.—Paid for drayage on merchandise \$5.

July 3.—Bought of David Spencer, on $\frac{a}{c}$, 50 bush. Apples, @ 50¢; 100 bushels Potatoes, @ \$1.—Sold D. N. Brown, on $\frac{a}{c}$, 3 bbls. Flour, @ \$5; 10 bu. Apples, @ 75¢.—Sold A. C. Knox, on $\frac{a}{c}$, 2 bbls. Flour, @ \$5; 25 bu. Potatoes, @ \$1.25. Received cash on $\frac{a}{c}$ \$30.—Paid for postage stamps, \$10.

July 4.—Sold G. W. Williams, on $\frac{a}{c}$, 25 bushels Potatoes, @ \$1.25; 20 bushels Apples @ 75¢.

July 5.—Paid David Spencer on $\frac{a}{c}$ \$50.—Received of A. C. Knox on $\frac{a}{c}$ \$10.

July 6.—Bought of G. N. Hudson, on $\frac{a}{c}$, 10 bbls. Mess Pork, @ \$15.—Paid David Spencer on $\frac{a}{c}$ \$20.

July 8.—Sold A. N. Peters, on $\frac{a}{c}$, 5 bbls. Mess Pork, @ \$18.—Sold H. C. Stockbridge, on $\frac{a}{c}$, 10 lbs. Oolong Tea, @ 80¢; 10 bushels Apples, @ 75¢.—Received cash of G. W. Williams in full of $\frac{a}{c}$ \$—. Paid for help around the store \$12.

July 9.—Sold Chas. E. Henker, 5 bbls. Mess Pork, @ \$17.—Received cash on same \$50.—Paid David Spencer on $\frac{a}{c}$ \$20.

July 10.—Sold A. N. Peters, 20 bushels Potatoes, @ \$1.20, on $\frac{a}{c}$.—Received of H. C. Stockbridge, cash on $\frac{a}{c}$ \$10.

July 11.—Sold D. N. Brown on $\frac{a}{c}$, 10 bu. Apples @ 70¢. Sold Frank Fisher on $\frac{a}{c}$, 5 bu. Potatoes @ \$1.20.

July 12.—Received of A. N. Peters, cash on $\frac{a}{c}$ \$100. Received of D. N. Brown, cash on $\frac{a}{c}$ \$25.

July 13.—Paid G. N. Hudson, cash in full of $\frac{a}{c}$ \$150.—Received of D. N. Brown on $\frac{a}{c}$ \$5.00.

July 15.—Inventory: Merchandise on hand, \$625.

DAY BOOK.

July 1.

Commenced business with the following resources:

Cash \$1000.

Merchandise 500.

\$1500.

		2	
(1)	A. C. Knox, Dr.		
	To 5 bbls. Flour, @ \$5.00,		25
	" "		
(2)	Frank Fisher, Dr.		
	To 25 lbs. Coffee, @ 20¢,	\$5.00	
	" 15 " Oolong Tea, @ 80¢,	<u>12.00</u>	17
	Cr.		
(2)	By Cash on a/c		10
		3	
(3)	David Spencer, Cr.		
	By 50 bu. Apples, @ 50¢,	\$25.00	
	" 100 " Potatoes, @ \$1.00,	<u>100.00</u>	125
	" "		
(4)	D. N. Brown, Dr.		
	To 3 bbls. Flour, @ \$5.00,	\$15.00	
	" 10 bush. Apples, @ 75¢,	<u>7.50</u>	22
	" "		50
(1)	A. C. Knox, Dr.		
	To 2 bbls. Flour, @ \$5.00,	\$10.00	
	" 25 bush. Potatoes, @ \$1.25,	<u>31.25</u>	41
	Cr.		25
(1)	By Cash on a/c		30

DAY BOOK.

		<i>July 4.</i>			
(5)	G. W. Williams, Dr.				
	To 25 bu. Potatoes, @ \$1.25,	\$31.25			
	" 20 " Apples, @ 75¢,	15.00	46	25	
		5			
(3)	David Spencer, Dr.				
	To Cash paid him on a/c		50		
		"			
(1)	A. C. Knox, Cr.				
	By Cash on a/c		10		
		6			
(6)	G. N. Hudson, Cr.				
	By 10 bbls. Mess Pork, @ \$15.00,	150			
		"			
(3)	David Spencer, Dr.				
	To Cash paid on a/c		20		
		8			
(7)	A. N. Peters, Dr.				
	To 5 bbls. Mess Pork, @ \$18.00,	90			
		"			
(8)	H. C. Stockbridge, Dr.				
	To 10 lbs. Oolong Tea, @ 80¢, \$8.00				
	" 10 bush. Apples, @ 75¢,	7.50	15	50	
		"			
(5)	G. W. Williams, Cr.				
	By Cash in full of a/c		46	25	
		9			
(9)	Chas. E. Henker, Dr.				
	To 5 bbls. Mess Pork, @ \$17.00,	85			
		Cr.			
(9)	By Cash on above		50		

DAY BOOK.

	July 9.	
(3)	David Spencer, Dr.	
	To Cash, paid on $\frac{a}{c}$,	20
	10	
(7)	A. N. Peters, Dr.	
	To 20 bush. Potatoes, @ \$1.20,	24
	"	
(8)	H. C. Stockbridge, Cr.	
	By Cash on $\frac{a}{c}$	10
	11	
(4)	D. N. Brown, Dr.	
	To 10 bush. Apples, @ 70¢,	7
	"	
(2)	Frank Fisher, Dr.	
	To 5 bush. Potatoes, @ \$1.20,	6
	12	
(7)	A. N. Peters, Cr.	
	By Cash on $\frac{a}{c}$	100
	"	
(4)	D. N. Brown, Cr.	
	By Cash on $\frac{a}{c}$	25
	13	
(6)	G. N. Hudson, Dr.	
	To Cash in full of $\frac{a}{c}$	150
	"	
(4)	D. N. Brown, Cr.	
	By Cash on $\frac{a}{c}$	5

CASH BOOK.

RECEIVED. PAID.

			RECEIVED.	PAID.
July	1	Amount on hand	1000	
"	2	Received on $\frac{a}{c}$ from Frank Fisher	10	
"	"	Paid for drayage on Mdse.		5
"	3	Received on $\frac{a}{c}$ from A. C. Knox	30	
"	"	Paid for Postage Stamps		10
"	5	Paid David Spencer on $\frac{a}{c}$		50
"	"	Received of A. C. Knox on $\frac{a}{c}$	10	
"	6	Paid David Spencer on $\frac{a}{c}$		20
"	8	Rec'd of G. W. Williams in full of $\frac{a}{c}$	46 25	
"	"	Paid for help around the store		12
"	9	Received from Chas. E. Henker on $\frac{a}{c}$	50	
"	"	Paid David Spencer on $\frac{a}{c}$		20
"	10	Rec'd from H. C. Stockbridge on $\frac{a}{c}$	10	
"	12	Received from A. N. Peters on $\frac{a}{c}$	100	
"	"	Received from D. W. Brown on $\frac{a}{c}$	25	
"	13	Paid G. N. Hudson in full of $\frac{a}{c}$		150
"	"	Received of D. W. Brown on $\frac{a}{c}$	5	
"	14	Balance on hand		1019 25
			1286 25	1286 25

LEDGER.

<i>Dr.</i>		<i>1. A. C. Knox.</i>				<i>Cr.</i>		
<i>July</i>	<i>2</i>	<i>To 5 bbls. Flour</i>	<i>25</i>		<i>July</i>	<i>3</i>	<i>By Cash</i>	<i>30</i>
<i>"</i>	<i>3</i>	<i>" Mdse.</i>	<i>41</i>	<i>25</i>	<i>"</i>	<i>5</i>	<i>" "</i>	<i>10</i>
					<i>"</i>	<i>15</i>	<i>" Balance</i>	<i>26 25</i>
			<i>66</i>	<i>25</i>				<i>66 25</i>

2. Frank Fisher.

<i>July</i>	<i>2</i>	<i>To Mdse.</i>	<i>17</i>		<i>July</i>	<i>2</i>	<i>By Cash</i>	<i>10</i>
<i>"</i>	<i>11</i>	<i>" 5 bu. Potatoes</i>	<i>6</i>		<i>"</i>	<i>15</i>	<i>" Balance</i>	<i>13</i>
			<i>23</i>					<i>23</i>

3. David Spencer.

<i>July</i>	<i>5</i>	<i>To Cash</i>	<i>50</i>		<i>July</i>	<i>3</i>	<i>By Mdse.</i>	<i>125</i>
<i>"</i>	<i>6</i>	<i>" "</i>	<i>20</i>					
<i>"</i>	<i>9</i>	<i>" "</i>	<i>20</i>					
<i>"</i>	<i>15</i>	<i>" Balance</i>	<i>35</i>					
			<i>125</i>					<i>125</i>

LEDGER.

Dr. 4. *D. N. Brown.* *Cr.*

July 3	To Mdse.	22	50	July 12	By Cash	25
" 11	" 10 bu. Apples	7		" 13	" "	5
" 15	" Balance		50			
		30	00			30

5. *G. W. Williams.*

July 4	To Mdse.	46	25	July 8	By Cash	46	25
--------	----------	----	----	--------	---------	----	----

6. *G. N. Hudson.*

July 13	To Cash	150		July 6	By 10 bbls. [Mess Pork	150
---------	---------	-----	--	--------	---------------------------	-----

LEDGER.

<i>Dr.</i>		<i>7. A. N. Peters.</i>				<i>Cr.</i>		
<i>July</i>	<i>8</i>	<i>To 5 bbls. Mess</i>			<i>July</i>	<i>12</i>	<i>By Cash</i>	<i>100</i>
<i>"</i>	<i>10</i>	<i>[Pork</i>	<i>90</i>		<i>"</i>	<i>15</i>	<i>" Balance</i>	<i>14</i>
		<i>" 20 bushels</i>						
		<i>[Potatoes</i>	<i>24</i>					
			<i>114</i>					<i>114</i>

8. H. C. Stockbridge.

July	8	To Mdse.	15	50	July	10	By Cash	10
					"	15	" Balance	5 50
			15	50				15 50

9. Chas. E. Henker.

July	9	To 5 bbls. Mess			July	9	By Cash	50
		[Pork	85		"	15	" Balance	35
			85					85

STATEMENT.

Resources or Property.

1. From Ledger Accounts—Balances due
from persons:—

A. C. Knox	26	25
Frank Fisher	13	
A. N. Peters	14	
H. C. Stockbridge	5	50
Chas, E. Henker	35	

2. From Cash Book:—Balance of Cash
on hand

1019 25

3. Inventory:—Merchandise on hand

625

1738

Liabilities or Debts.

From Ledger Accounts — Balances due
other parties:—

David Spencer

35

D. N. Brown

50

35 50

Worth at close
Investment

1702 50

1500

Net Gain

202 50

HOW TO KEEP FARM ACCOUNTS.

RULES FOR KEEPING ACCOUNTS.

The following are suggested as simple forms for keeping accounts for the use of those whose business or taste does not require a more elaborate form of book-keeping:—

Always charge or "debit" a person for what he may get, and "credit" him for what you receive from him. The word "To," prefixed to an entry, indicates a debit, and the word "By," a credit.

The books necessary are two, called a Day Book and Ledger. In the Day Book should be entered, in diary form, every transaction as it occurs, using as simple and concise wording as possible to express all the facts.

Accounts may be opened with "Cash," "Stock," "Merchandise," "Bills Payable," "Bills Receivable," "Interest," "Profit and Loss," "Expense," etc.; and the farmer may open accounts with each field of his farm, as "Field No. 1," "Field No. 2," "Orchard," "Meadow," etc., charging each field with the amount of labor and material expended upon it, and crediting it with its products. He may also keep an account with his cows, pigs, fowls, etc., and thus at any time tell at a glance the profits or losses of each department of his business.

CASH BOOK.

Cash Rec'd. Cash Paid.

1891					
May	2	Received for 500 bush. Corn.....	200	00	
"	5	Paid Hired Man.....			20 00
"	6	Paid Interest.....			150 40
"	10	Received for 22 Hogs.....	208	90	
"	12	Paid for Groceries.....			11 90
"	15	Received for 20 doz. Eggs.....	2	00	
"	19	Received for One Cow.....	20	00	
"	23	Paid for Coal.....			16 00
"	27	Paid for Lumber.....			102 65
June	1	Received for Butter.....	9	25	
"	2	Received one Load of Hay.....	6	30	
"	10	Balance Cash on Hand.....			145 50
		NOTE:—To find the balance in cash add up the amount received and subtract from that the amount paid out and the result will always equal the cash on hand.	446	45	446 45



LEGAL POINTS ON BOOK-KEEPING.

PRACTICAL SUGGESTIONS FOR BUSINESS MEN.

1. The day book, or other books of original entries, are evidences of sale and delivery of goods, and work done.

2. The time to make an entry against the purchaser is when the goods are ready for delivery.

3. Entries, to be admissible as evidences, should be made by the proper person, and made without erasure, alterations or interlineation.

4. Mistakes should be corrected by marking the wrong entry void, and then making a correct entry, or if there is sufficient room, make a brief explanation.

5. All accounts must be itemized, and no general charge can be considered as evidence without giving the items.

6. If A. guarantees that he will see that B. will pay a certain bill of goods, then the goods must be charged to A. and not to B., but if A. guarantees the account of B., if the account is for some date of the past, then such a guarantee must be in writing.

7. To collect a debt on the evidence of book account, from a person in a distant place, a copy of the account should be made out, and accompanied with an affidavit, setting forth that the above account is correctly taken from the book of original entries, and that the charges were made at or about the time of their respective dates, that the goods were sold and delivered at or about the time the charges were made, and the charges are correct, and accounts just, and that the person named is not entitled to any credits not mentioned in the account. This affidavit should be sworn to before a magistrate, commissioner or notary public, and it will save the trouble of producing or sending books.

FORM OF ENTRIES IN DAY BOOK.

Springville, January 5, 1891.		Dr.	Cr.
Chas. Wadsworth,	Dr.		
To 1 Ton Hay.....		\$14 00	
Cash,	Cr.		
By Paid Interest on Mortgage.....			\$72 00
Expense,	Dr.		
To Repairing Wagon.....		1 75	
Jan. 6.			
John Smith,	Dr.		
To 1 Cord Wood.....		4 25	

CONVENIENT FORM OF ENTRIES IN LEDGER FOR FARMERS.

Charles Wadsworth.

1891			
Jan. 5	To 1 Ton Hay.....	\$14 00	
" 30	" 2 Bbls. Potatoes, at \$1.75..	3 50	
March 4	By Cash on account.....		\$10 00
" 20	To 1 Cord Wood.....	4 25	
April 7	By 1 Plow		17 50
May 3	To 10 Bush. Oats, at 40 cents	4 00	
June 10	" 3 Bbls. Potatoes, at \$2.....	6 00	
July 1	By balance charged below.....		4 25
		\$31 75	\$31 75
July 1	To balance.....	\$4 25	

FORM OF BILLS.

NEW ORLEANS, *July 26, 1891.*

MR. J. SMITH,

To B. H. FENTON & Co., Dr.

To 48 yds. Muslin,	@ .22	10	56
" 12 " Drilling,	" .18	2	16
" 10 " Gingham,	" .35	3	50
" 20 " French Chintz,	" .40	8	00
" 7 " Broadcloth,	" 3.25	22	75
" 2 doz. Spools Thread,	" .75	1	50
" 1 " Linen Napkins,	" 2.00	2	00
" 3½ yds French Cassimere,	" 1.90	6	65
Rec'd payment,		\$57	12
B. H. FENTON & Co.			



HOW TO KEEP A FARMER'S ACCOUNT.

Cornfield.

			Dr.	Cr.
1892				
April	4	To 7 days' Plowing @ 2.50.....	17	50
"	8	" 2 days' Furrowing @ 2.40.....	4	80
"	"	" 2 bush. Seed @ 2.50.....	5	
"	"	" 8 days' Planting @ 1.50.....	12	
May	1	" 3 days' Hoeing @ 1.25.....	3	75
"	8	" 8 days' Cultivating @ 2.00.....	16	
"	"	" 12 days' Hoeing @ 1.25.....	15	
Aug.	14	" 9 days' Cutting Corn @ 1.25.	11	25
"	28	By 12 bush. Corn @ 75 c.....		9
Oct.	22	" 74 bush. Corn @ 42c; Cornstalks \$50		81
"	24	To 40 days' Husking @ 1.25.....	50	
"	"	" 5 days' work with team @ 2.50.....	12	50
"	"	By 20 bush. Corn @ 40 c.....		8
Nov.	3	" 12 bush. Corn @ 40 c.....		4
"	17	" Cash for 300 bush. Corn @ 75 c.....		225
"	25	" Cash for 80 bush. @ 75c.....		60
"	31	To Marketing 380 bush. Corn @ 4c.....	15	20
"	"	" Interest	35	
Total Gain.....			189	80

Family Expense Account.

			Dr.	Cr.
1879				
Jan.	5	To 2 prs. Boots @ 6.00.....	12	
"	15	" 1 pr. Ladies' Boots.....	2	50
"	19	" M. Cohn, Cutting Pants and Vest.....	3	
"	16	" 1 lb Tea.....	1	
Mch	15	" 3 yds. Cassimere @ 2.00; Sundries 4.75	10	75
May	29	" 1 pr. Boots @ 2.50; Rep'g Shoes 50c	3	
June	20	" 1 pr. Pants.....	8	
Sept.	24	" 1 pr. Shoes 1.75; 1 pr. Boots 4.00.....	5	75
"	24	" 1 Umbrella 2.00; Sundries 2.75.....	4	75
Nov.	3	" 1 pr. Boots.....	8	
Dec.	18	" M. Cohn, Cutting Pants.....	1	50
"	18	" 1 pr. Boots.....	5	
Total Expense.....			65	25
			65	25

HOW MERCHANTS MARK GOODS.

It is customary in many mercantile houses to use a private mark, which is placed on the goods to denote their cost and selling price. A word or phrase containing ten different letters is taken, the letters of which are written instead of figures. For instance, the word "Rockingham" is selected; then the letters represent the figures as follows:—

r	o	c	k	i	n	g	h	a	m
1	2	3	4	5	6	7	8	9	0

If it is required to mark 1.50, it is done thus, *rim*; 75 would be *gi*; 37, *cg*, &c.

Blacksmith, Importance, Republican, Perth Amboy, Fair Spoken, Now be sharp, Noisy Table, and Cash Profit, are among the words and phrases which can be used in this manner.

An extra letter, called a "Repeater," is used to prevent the repetition of a figure. Instead of writing *edd* for 100, which would show at once that the two right-hand figures were alike, and thus aid in giving a clue to the key-word, some additional letter would be selected for a repeater, —*y*, for instance,—and then the price would be written *cdy*; 225 would be written *uye*.

Instead of letters, arbitrary characters are frequently used, something like the following:—

┐	z	T	>	△	×	┘	≡	Λ	□
1	2	3	4	5	6	7	8	9	0

Fractions may be designated by additional letters or characters. Thus, *f* may represent $\frac{1}{2}$, *w* $\frac{3}{4}$, &c.; or $\frac{1}{2}$ may be written *o*, $\frac{1}{4}$ +, &c.



THE COST AND SELLING PRICE.



Rapid Methods for Marking Goods.

Those who buy largely can best appreciate the value of a quick and rapid method for calculating the per cent. of profits desired.

If you wish to calculate the per cent. on a single article, the following table will be an excellent method. If you desire to sell an article at any of the following per cents, say the article costs 70 cents, and you wish to make

- 10 per cent. divide by 10, multiply by 11=77.
- 20 per cent. divide by 10, multiply by 12=84.
- 25 per cent. multiply by 10, divide by 8=87½.
- 30 per cent. divide by 10, multiply by 13=91.
- 33⅓ per cent. add ⅓ of itself=93⅓.
- 33⅓ per cent. divide by 3, multiply by 4=93⅓.
- 50 per cent. add ½ of itself=\$1.05.

Merchant's Retail Rule.

As many articles, such as tea, sugar, coffee, etc., are sold at a given number of pounds per dollar, the following method will show the number of pounds that can be purchased for any number of cents.

RULE.—*Multiply the number of pounds to be sold for one dollar by the number of cents worth desired.*

EXAMPLE.—When sugar is sold at fourteen pounds for a dollar, how many pounds can be purchased for seventy cents?

Solution, $14 \times .70 = 9.80$ or $9 \frac{4}{5}$



"His burden of debt he bore to the grave."

HOW TO COLLECT DEBTS.

1. If no settlement can be reached by mutual agreement, and every effort has been exhausted for reaching a settlement, the next thing to do is to carry the matter into the courts and there have it adjusted according to law. But this method is both expensive and uncertain. A settlement, though not very satisfactory is often better than the results which can be reached through the courts.

2. **ARREST.**—The arrest of the debtor can only be made to secure the person of the debtor (or defendant) while the suit for debt is pending, or to force him to give security for his appearance after judgment, but in some States no arrests are allowed, except in criminal cases.

3. **ATTACHMENT.**—This is a writ issued by the Justice of the Peace or Judge, or some other officer having jurisdiction, commanding the sheriff or constable to attach the property of the debtor, to satisfy the demands of the creditor. This writ may be issued at the beginning or during the suit. In some States, Alabama, Illinois, Louisiana, Mississippi, Missouri and others, the creditor may retain possession of the property and give a bond as a guarantee that the property will be held for the debt in case he is defeated in the suit. All attachments lose their validity in case the debtor (or defendant) wins the suit.

4. **JUDGMENT AND EXECUTION.**—A suit is ended by the courts

giving a judgment, either in favor of the debtor or the creditor. If the attachment is in favor of the plaintiff and the defendant refuses to pay the amount of the judgment, an execution is issued by the court which commands the sheriff to take sufficient property of the defendant, if it can be found, to satisfy the judgment. The sheriff may also seize the person of the defendant and imprison him until he pays judgment or the same is discharged by judicial decision of insolvency. Real estate, however, cannot be sold on execution in some States, unless a jury should find that the profits in rents, etc., will not pay the judgment within the limit of seven years, or some other time fixed by law.

5. **GARNISHMENT.**—After judgment has been rendered, the money or goods due the defendant, if in the hands of a third person, may be attached to pay the plaintiff. The person in whose hands the money or goods attached are, is known in law as the garnishee or trustee.

6. **MECHANICS' LIENS, HOMESTEAD EXEMPTIONS, NOTES, MORTGAGES, CONTRACTS, ETC.,** are explained under proper headings in other parts of the book.

THE CREDIT SYSTEM—ITS ADVANTAGES AND DISADVANTAGES.

1. There are many good reasons why people should pay cash for everything purchased. Hopeful people will always buy more freely if they can get it on credit, and are never anxious about pay day to come around.

2. Remember that those who sell on credit *must charge from ten to fifteen per cent. more for goods* in order to cover the interest and risks. It has been found that from seven to ten per cent. of trusted out accounts become worthless.

3. It is always uncertain which of the trusted persons will fail to pay his account, and consequently all persons buying on credit have to share the extra prices, in order to meet the losses which all business men sustain that do a credit business.

4. Remember, the man who can pay cash for goods, or whatever purchases he may make, *can always secure a better bargain than the man who buys on credit.* It therefore will be a great saving if everyone could manage, by rigid economy if necessary, to pay cash for everything they buy. It would pay a high rate of interest on everything purchased.

5. Persons who buy real estate, or merchants who buy large quantities of goods, may often find it necessary to buy on credit. Many of our wealthiest farmers and business men made their money largely in having the benefit of credit, but, at the same time, if cash could be paid for everything purchased, whether real estate or other articles, it would be a great saving to the purchaser.

6. *Keep your word as good as a bank and you will always have credit when you desire it, and friends when you need them.*

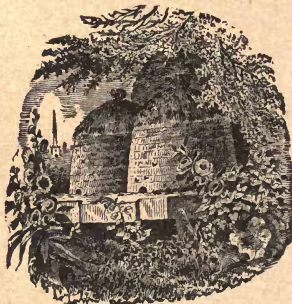


HOW TO MAKE CHANGE QUICKLY.

1. Consider the amount of the purchase as money already counted out ; for example, if the purchase amounts to 46 cents, and you are handed a \$2.00 bill in payment, count out 4 cents to make it 50 cents, then count out the other \$1.50.

2. Should the purchase amount to \$2.54, and you are handed \$10.00, count out 46 cents to make it \$3.00, then count out even dollars to make the \$10.00, and your change is correct.

3. Always count your change after receiving, and see that it is correct.



HOW TO OBTAIN WEALTH.

The way to make money is to save it. Always remember and practice the maxim, "A dollar saved, a dollar earned."

A small sum of money saved daily for fifty years will grow at the following rate :

DAILY SAVINGS.

One Cent.....	950	Fifty Cents.....	\$47,520
Ten Cents.....	9,504	Sixty Cents.....	57,024
Twenty Cents.....	19,006	Seventy Cents.....	66,528
Thirty Cents.....	28,515	Eighty Cents.....	76,032
Forty Cents.....	38,015	Ninety Cents.....	85,537
One Dollar.....			\$475,208.



"The man who is in debt carries a world of trouble."—*Burke.*

The Amount of Property that Cannot be Taken for Debts in the Different States.

1. Exemption Laws are for the purpose of protecting those who are unable to pay their debts without causing distress to themselves and their families.

2. Property covered by mortgage cannot be held.

3. A safe estimate of the property of the person desiring credit should be made before credit is given.

	Personal Property.	Value of Homestead.		Personal Property.	Value of Homestead.
Alabama.....	\$1000.....	\$2000	Montana.....	\$ 900.....	\$5000
Arizona.....	900.....	5000	Nebraska.....	.....	2000
Arkansas.....	500.....	2500	Nevada.....	900.....	5000
California.....	900.....	5000	New Hampshire..	550.....	500
Colorado.....	1000.....	2000	New Jersey.....	200.....	1000
Connecticut.....	500.....	.....	New Mexico.....	900.....	5000
Delaware.....	200.....	.....	New York.....	250.....	1000
Dist. of Columbia	300.....	.....	North Carolina...	500.....	1000
Florida.....	1000	No waiver.	North Dakota.....	1500.....	160 acres.
Georgia.....	300.....	1600	Ohio.....	100.....	1000
Idaho.....	300.....	5000	Oregon.....	300.....	.....
Illinois.....	400.....	1000	Pennsylvania.....	300.....	.....
Indiana.....	600.....	.....	Rhode Island.....	500.....	.....
Iowa.....	200.....	40 acres.	South Carolina...	500.....	1000
Kansas.....	800.....	160 acres.	South Dakota.....	750.....	160 acres.
Kentucky.....	200.....	1000	Tennessee.....	1200.....	1000
Louisiana.....	.....	Total, 2000	Texas.....	.....	5000
Maine.....	300.....	500	Utah.....	.....	1000
Maryland.....	100.....	.....	Vermont.....	200.....	500
Massachusetts.....	450.....	800	Washington.....	900.....	5000
Michigan.....	400.....	1500	W. Virginia.....	200.....	1000
Minnesota.....	800.....	80 acres.	Wisconsin.....	450.....	40 acres.
Mississippi.....	550.....	2000	Wyoming.....	900.....	5000
Missouri.....	300.....	1500			

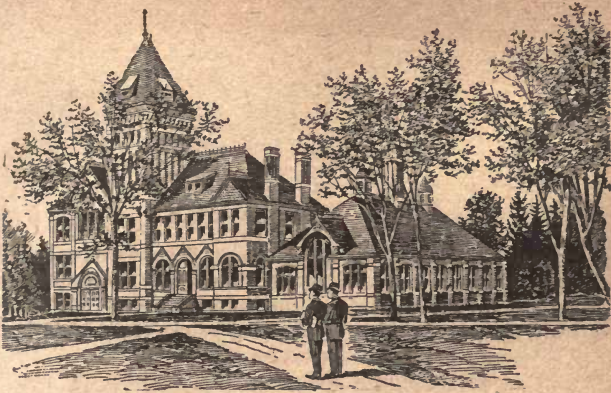
THE TIME IN WHICH DEBTS ARE OUTLAWED IN THE DIFFERENT STATES AND BRITISH PROVINCES.

1. The time to sue varies in different States and in different classes of cases from one to twenty years.

2. In accounts it generally begins from the purchase of the last item, and is renewed by every partial payment.

3. In case the debtor makes a written acknowledgment in a note, or papers of that character, the claim is renewed.

States and Territories.	Contracts in Writing. Sealed Instruments. Judgments. Open Accounts.				States and Territories.	Contracts in Writing. Sealed Instruments. Judgments. Open Accounts.			
	YRS.	YRS.	YRS.	YRS.		YRS.	YRS.	YRS.	YRS.
Alabama	6	10	20	3	Nevada	6	4	5	2
Arkansas.....	5	5	10	3	New Hampshire..	6	20	20	6
Arizona	4	4	5	2	New Jersey.....	6	16	20	6
California	4	4	5	2	New Mexico.....	6	6	15	4
Colorado	6	6	3	6	New York.....	6	20	20	6
Connecticut.....	6	17	17	6	North Carolina...	3	10	10	3
Delaware.....	6	20	20	3	North Dakota	6	20	20	6
Dist. of Columbia.	3	12	12	3	Ohio	15	15	15	6
Florida.....	5	20	20	4	Oregon	6	10	10	6
Georgia	6	20	..	4	Pennsylvania.....	6	20	20	6
Idaho	4	4	5	2	Rhode Island.....	6	20	20	6
Illinois.....	10	10	20	5	South Carolina....	6	20	20	6
Indiana.....	10	20	20	5	South Dakota.....	6	20	20	6
Iowa	10	10	20	5	Tennessee..	6	10	10	6
Kansas.....	5	5	15	3	Texas.....	4	4	10	2
Kentucky	15	15	15	5	Utah	4	4	5	2
Louisiana	5	10	10	3	Vermont.....	6	8	8	6
Maine	6	20	20	6	Virginia	5	20	20	5
Maryland.....	3	12	12	3	Washington	6	6	6	5
Massachusetts....	6	20	20	6	W. Virginia.....	10	10	10	5
Michigan	6	10	10	6	Wisconsin	6	20	20	6
Minnesota	6	10	10	6	Wyoming	5	5	...	4
Mississippi.....	6	7	7	3					
Missouri	10	10	20	5	Canada.....	6	20	20	6
Montana	6	6	6	3	New Brunswick...	6	20	20	6
Nebraska	5	5	5	4	Nova Scotia	6	2	...	6



How to Write a Subscription to Build a Church or Bridge or other Public Works.

WE THE UNDERSIGNED, do severally promise and agree to pay F. J. Davis, George Haight, and B. F. Lincoln, Trustees of the Congregational Society of Ottawa, Illinois, (or the Commissioners of Highways of the Township of Ottawa,) the sum set opposite our respective names for the purpose of building a church for said society in the city of Ottawa aforesaid, (or for the purpose of building a bridge across the Illinois river,) and we request the said Trustees, (or Commissioners,) for the contract for the building of said church, (or bridge,) and to build the same and to apply the sums of money hereunto subscribed in payment thereof.

Witness our hands this first day of July, 1891.

William Hull,	-	-	-	-	-	\$200.00
Jacob Moss,	-	-	-	-	-	100.00
Thomas J. Davis,	-	-	-	-	-	50.00



LAWS OF THE PUBLIC ROAD.

1. **PUBLIC ROADS** are those which are laid out and supported by officers entrusted with that power. Their care and control is regulated by the statutes of the different States, and in detail will not be referred to here, as they can be easily looked up by those who desire information so entirely local.

2. **OWNERSHIP.**—The soil and the land remains in the owner, who may put the land to any use, and derive from it any profit, not inconsistent with the rights of the public. If the road is at any time discontinued, the land reverts back to the owner.

3. **LIABILITY.**—The repair of highways is usually imposed upon towns, and they are made liable by statute for all damages, against persons or estates, from injuries received or happening in consequence of a neglect of duty on the part of the officers having the same in charge.

4. **LAW OF THE ROAD.** Persons traveling with carriages or vehicles of transportation, meeting on any public way, are required to turn their carriages or wagons to the right of the center of the road, so far as to permit such carriages or wagons to pass without interruption.

5. **RUNAWAYS.**—The owner of a runaway horse or horses, if negligent, or not exercising due care, is responsible for all damages that may occur.

6. Any unreasonable occupation of the public way, whether arising out of a refusal to turn out and allow a more rapid vehicle to pass, or from an unjustifiable occupancy of such a part of the road as to prevent others from passing, will render the party so trespassing liable for damages to any suffering injuries therefrom. A loaded vehicle must turn out, and allow those to pass who may reasonably and lawfully travel faster.

PETITION FOR LAYING OUT A ROAD.

*To the Commissioners of the town of Lisle,
County of Du Page, and State of Indiana.*

Your petitioners of the town of Lisle would respectfully represent that the public convenience and wants require that a road and highway should be laid and constructed, beginning at the Northwest corner of J. D. Wild's farm, in the town of Lisle, and leading in a direct line South to the town of Bennington.

Your petitioners would therefore ask that your honors would view the premises, and locate and construct said road and highway, according to the laws in such cases made and provided, as shown by the Statutes of the State.

(SIGNATURES.)

(SIGNATURES.)

NOTE.—The places where the road commences and ends should be particularly described, but the farms and lots through which it is to pass need not be described.

This form will apply whether to the commissioners of a town or county.

PETITION FOR CHANGING A ROAD.

To the Commissioners for the County of ———

The undersigned respectfully represent that the public road and highway from the house of W. S. Waite, in the town of Barnard, passing the house of G. H. Schaefer, to the house of John Young, in the town of Diegel, is indirect, inconvenient, and out of the way; wherefore, your petitioners request your honorable body to view the premises, straighten or new locate such road, and discontinue such parts of the present highway as may be useless, or make such alterations and improvements as shall appear to your honors necessary.

(SIGNATURES.)

(SIGNATURES.)



**AMERICA'S GREAT LAWYER,
WM. M. EVARTS,
WHO RECEIVED \$250,000 FOR SAYING YES.**

ALL ABOUT RIGHTS OF WAY.

When one person has a right to pass over the land of another, this right is called a right of way. There are three methods by which this right can be acquired: 1st, by purchase or land grant from the owner of the land, 2nd, by long-continued use or prescription, 3rd, by necessity. To obtain a permanent right of way by the first method, there must be a complete deed of it, with all the formalities required in a deed of the land itself. It is such an interest in the land as the law requires to be by a deed. If the bargain was an oral one, or even in writing, if not in the form of a deed, it would not hold. It should be granted under seal and acknowledged in those States where the law requires a deed to be sealed and acknowledged.

A right of way is acquired by prescription by an adverse use for 20 years. In some States 15 years or some other

period is the time needed. By adverse use is meant a use under a claim of right. If used by consent of the owner of the land it will not be sufficient. If one person allows another to pass over his land as a favor, this permission will never ripen into a legal right which the owner of the land cannot put an end to. The way must have been used in an open, peaceable manner and continuously during all these years. Its use must have been an uninterrupted one, but not necessarily by the same person. It is sufficient if by the owner of the estate, for which the right is claimed, continued from seller to buyer, or from ancestor to heir.

When the right is once acquired it continues to belong to the estate in favor of which it exists, and is called an easement in the land of the other. A way by necessity arises when a landowner sells off the back part of his lot and there is no legal way by which the purchaser can get on to his purchase except by passing over the remaining land of the seller. He has then the right to pass over this remaining land to go to his own, so long as the necessity exists. If the purchaser buys some adjoining land over which he can get out to the highway, or if a new road should be opened to the land, the right of way is ended, although the new way may not be so direct or convenient as the old one. It is said to be a poor rule which will not work both ways. So if a landowner sells the part of his land nearest to the street and there is no means by which the seller can get out from his remaining land except over the part sold, he has a right to pass and repass for that purpose over the land sold, even if he has conveyed the property by a deed warranting it free from all incumbrance. Unless the extent of the right is defined in the deed conveying it, it must be exercised in one place and in a reasonable manner.

The owner of the right cannot go just where he pleases over the property of the owner of the land. Generally the landowner can designate where the way shall be, and it need not necessarily be the shortest or the most convenient route. If the landowner does not designate, the owner of the right may select his route, but should do it in a proper place, with reasonable regard to the interest of the owner of the land. When the right has been acquired by prescription, it must be continued in the particular place where the claim was used which has become the right by user. In fact, a claim to wander at will over the property of another cannot become the foundation of a legal right. When the person owning the right has selected the place for his right, he cannot change it, but if it becomes suddenly impassable, or if it becomes obstructed, he may deviate from it,

passing over adjoining land, but doing as little damage as possible till the place is made passable or the obstructions removed.

The owner of the land is not bound to keep the way in repair. His duty is ended when he allows the owner of the right to pass. The owner of the right may repair it himself, and remove all obstacles to the use of the right. The owner of the land may, in the absence of any agreement to the contrary, erect suitable gates and bars at the entrance of the way, and if so erected, the persons using the way must close them after they have passed through. If they do not they are liable for all damages done by reason of cattle escaping from the land or cattle coming on the land from the outside.

In the case of a right gained by prescription, if it was acquired for some particular purpose, as for carting wood from a wood lot, it cannot be used against the permission of the landowner for other purposes, after the wood has been cut off, if it increases the travel over it, or the burden of the way. A right acquired for passage on foot does not carry with it a right to go with a team. The use of the right is not confined to the owner of the adjoining land, but can generally be used, if not limited by any of the principles above stated, for ordinary access to or from the property. Such a right is not generally a personal right, but passes with the estate to which the right belongs, from one owner to another.



NOTICE TO WORK ON THE ROAD.

To Mr. H. J. Harter,

Lombard, Ill.

You are hereby notified that your road tax of \$2.48 and poll tax of \$2.50 is now due, and if you desire to work out the same on the public road, you will report for duty on the turn-pike, just east of G. E. Gasser's residence, May 28th, 1891, at 7 o'clock A. M. A part or the whole tax may be paid in cash, if preferred.

G. F. Diegel,

Commissioner or Path Master.

ESTRAY NOTICE.

Take Notice! — On the 3rd day of June, 1891, there strayed on to my inclosed land in the town of Van Wert, County of Du Page: One two-year old colt, a dark bay, with small star in the forehead, and left hind foot white; and one dark brown calf, with black spots on each side. Anyone claiming the above described animals can obtain possession of same by furnishing sufficient proof of ownership, and paying all expense and cost.

J. A. Hertel.

1. The above notice may be printed in the local paper, or written out, and tacked up in three or four prominent places in the vicinity where the stray animal was taken up.

2. No one can claim a stray without advertising the same, and giving the proper notice, such as the statutes of the State require.

3. If the stray is not redeemed by the owner, it may be sold at public auction to pay cost and expense.



SWINDLING SCHEMES.

SIX PRACTICAL RULES TO REMEMBER.

1. BEWARE OF THE SWINDLER, He is everywhere and in all kinds of business.

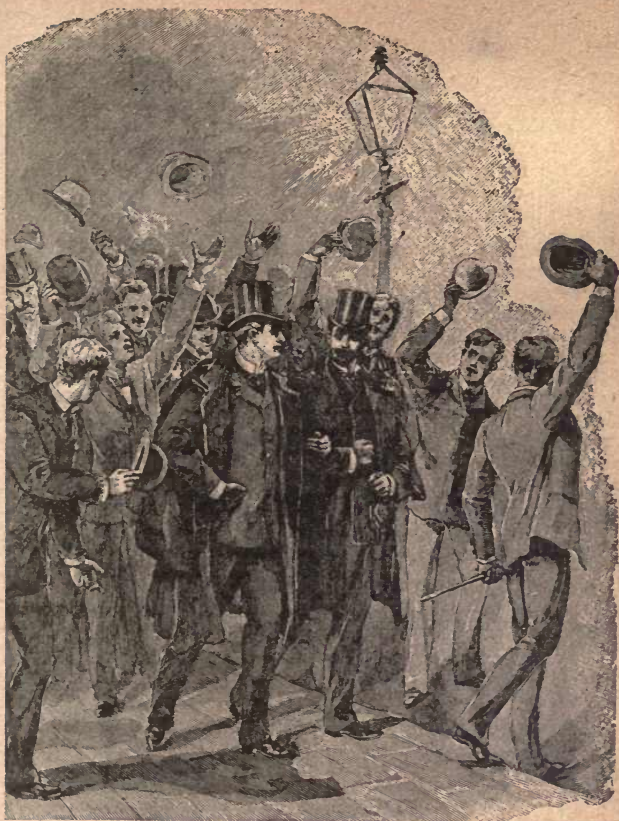
2. *Never sign a paper of any kind for a stranger. Make every man unknown to you, who desires to do business with you, prove to you, beyond a doubt, that his business is legitimate and that he acts within the limits of his authority.*

3. *Never try to beat a man at his own game.* The sharpers at every fair and circus and other places where people in large numbers congregate, will always offer you great inducements with cards, dice, wheels of fortune, etc. They will urge you to bet on a certain card or number and show you how one dollar could have won \$20.00 or a \$100.00; but when you bet your money, you never win.

4. *Never bet or gamble.* In trying to get something for nothing, we too often find ourselves the victims of confidence and swindling schemes. Honesty is the best policy, always has been and always will be.

5. *Never try to get the best of a sharper by buying a box, watch-case, or anything else in which you have seen him put a \$10 or a \$20 bill.*

6. Deal with responsible parties, or see that the article is worth the price before paying for it, and you will never suffer the mortification of being *swindled*.



CHEERING THE OWNER OF THE WINNING HORSE AT THE RACES.

GAMBLING AND BETTING.

1. Every Device that suddenly changes money or property from one person to another without leaving an equivalent, produces individual embarrassment—often extreme misery. More pernicious is that plan, if it changes property and money from the hands of the many to the few.

2. **Inflicts Injury.**—Gambling does this, and often inflicts a still greater injury, by poisoning its victims with vice that eventually leads to crimes of the darkest hue. Usually, the money basely filched from its victims is the smallest part of the injury inflicted. It almost inevitably leads to intemperance. Every species of offense, on the black catalogue of crime, may be traced to the gambling table, as the entering wedge to its perpetration.

3. **Innocent Amusement.**—To the fashionable of our country, who play cards and other games as an innocent amusement, we may trace the most aggravated injuries resulting from gambling. It is there that young men of talents, education and wealth, take the degree of entered apprentice. The example of men in high life, men in public stations and responsible offices, has a powerful and corrupting influence on society, and does much to increase the evil, and forward, as well as sanction the high-handed robbery of fine dressed blacklegs. The gambling hells in our cities, tolerated and patronized, are a disgrace to a nation bearing a Christian name, and would be banished from a Pagan community.

4. **Variety of Forms.**—Gambling assumes a great variety of forms, from the flipping of a cent in the bar room for a glass of whiskey, up to the splendidly furnished faro bank room, where men are occasionally swindled to the tune of "ten thousand a year," and sometimes a much larger amount. In addition to these varieties, we have legalized lotteries and fancy stock brokers, and among those who manage them, professors of religion are not unfrequently found.

5. **Gaming.**—Gaming cowers in darkness, and often blots out all the nobler powers of the heart, paralyzes its sensibilities to human woe, severs the sacred ties that bind man to man, to woman, to family, to community, to morals, to religion, to social order, and to country. It transforms men to brutes, desperadoes, maniacs, misanthropists, and strips human nature of all its native dignity. The gamester forfeits the happiness of this life, and endures the penalties of sin in both worlds.

6. **Betting on the Races.**—Look for greatness and goodness on the race track. Where is it to be found? The men who have paved their way to the front in achieving success have never been the companions of jockies or gamblers. Those who follow the races will live to seriously regret their folly.

7. **Shun the Monster.**—Let me entreat all to shun the monster, under all his borrowed and deceptive forms. Remember that gambling for amusement is the wicket gate into the labyrinth, and when once in, you may find it difficult to get out. Ruin is marked in blazing capitals over the door of the gambler; his hell is the vestibule to that eternal hell where the worm dieth not and the fire is not quenched.

8. **Terrible Consequences.**—The youth should not forget that if he is once taken in the coils of this vice, the hope of extricating himself, or of realizing his visions of wealth and happiness, is exceedingly faint. He has no rational grounds to expect that he can escape the terrible consequences that are inseparably connected with sin. If he does not become bankrupt in property he is sure to become one in character and in moral principle; he becomes a debauched, debased, friendless vagabond.



WHAT IS THEIR FUTURE?

A SWINDLING NOTE.

263

Naperville, Ill., Oct. 20, 1891.

One year after date, I promise to pay Fred. J. Davis, or bearer Ten Dollars, when I sell by order Four Hundred and Seventy-five Dollars (\$475.00) worth of Patent Fanning Mills, for value received, at ten per cent. per annum. . . . Said ten dollars when due is payable at Naperville, Illinois.

Witness: M. J. Mayer.

E. E. Selby,

Agent for Fred. J. Davis.

-
1. Although the above scheme of the confidence man has been exposed time and time again, yet it still continues to add yearly to its list of victims. A paper is drawn up wherein a farmer agrees to pay ten or twenty dollars when he has sold goods to a given amount. By tearing off the right-hand end of this paper, what is apparently an agreement for a small amount, becomes a promissory note for a considerable sum. This note is sold at a bank, thereby becoming the property of a third and innocent party, and the signer of the agreement is called upon to pay the note.
 2. Never sign a paper without carefully reading and examining the same. It is dangerous to sign a paper for an unidentified stranger.



DON'T TRY TO GET SOMETHING FOR NOTHING.

THE CHEAP JEWELRY SWINDLE.

Experience has proven again and again, that there is nothing gained BY TRYING TO BEAT A MAN AT HIS OWN GAME and succeed in getting something for nothing.

THE SWINDLE.

The auctioneer starts out, after getting a crowd about him, by giving back to the purchasers more money than they paid for the article, but this does not generally last long. Higher priced articles are soon put up, such as watches, etc., and the price raised from 50 cts., or a \$1.00 to \$10.00 or \$20.00. The purchaser sees the seller stick a \$20.00 bill or a \$50.00 bill into the watch and close it up, and so sure are the spectators that they saw the money go into the watch that there is no lack of purchasers. But when the watch is purchased and opened it contains a \$1.00 bill instead of a \$20.00, and the purchaser is a wiser, but not a richer man.

COUNTERFEIT MONEY SWINDLE.

This scheme has long been practiced in different parts of the country, yet the victims are numerous, hundreds being added annually to the list.

It is simply a shrewd system of black-mailing, and worked as follows : The swindlers or black-mailers (as they can more properly be called) get together, make up plausible circulars, and secure advertisements in local newspapers in the territory which they intend to work up. No work is done in their own neighborhood, all operations being planned from headquarters when the victims are selected. The "gang" has a number of schemes, but the favorite one is, to send some person, who has answered their circulars, a genuine new bill, and to get him on pretense, to see if it is good. As the bill is genuine there is no difficulty in passing it. The dupe is then informed that he will be supplied with any amount of similar good money at a trifling cost.

If the man bites the tempting bait placed before him, he is made to sign a document which he is told admits him to membership in a secret society known as the Y. F. A. R., and the money is to come in a few days. Instead, however, a man makes his appearance who represents himself as a United States officer ; he shows up the document signed by the poor fellow, which practically proves to be a confession of circulating counterfeit money, and also calls his attention to the bill which he passed.

The victim is told that he must go to Washington and be tried by a United States Court, and the penalty for making and passing counterfeit money is also read. He is cleverly told the long delay at heavy cost and the sure penalty.

When the victim is sufficiently wrought up, the officer offers to compromise for all the way from \$200 to \$2,000. The money is paid or secured, the document torn up and the dupe released.

NOTE.—A man who is caught in a swindling scheme of this kind is utterly helpless and at the mercy of his captors. He dare not go to officers and make complaint against the rascals without exposing himself, because he never would have been caught in the trap had he not shown a willingness to handle and pass counterfeit money, and consequently is as guilty as the swindler in the eyes of the law.

BEWARE OF STRANGERS WHO OFFER YOU GREAT INDUCEMENTS. BEWARE! BEWARE!! BEWARE!!!



A SWINDLER SECURING THE SIGNATURE OF HIS VICTIM.

THE BARB-WIRE SWINDLE.

The "Wire Fence Man" is a new swindler working the farmers. The scheme is a shrewd one and is executed as follows: A nicely dressed man, very pleasant in his manners, meets the farmer in his field or at his home, and desires the privilege of exhibiting his wire fence stretcher machine, for which privilege he will build the farmer thirty or forty rods of good fence for exhibition. All the agent asks is board while he is at work on the fence, with the understanding that the farmer is to go after the machine at the nearest depot and pay the charges not to exceed \$3.00 for the fence, all set up where he wants it. In order to have everything understood, and as a warrant of the farmer's good intentions, he requires him to sign a written order on a postal card, which he mails (as he says) to his partner, which proves to be a written contract for the machine, price \$200 (worth less than \$25.00). After the machine comes, a new man turns up with the postal

order for the machine, and requires the payment of the \$200 as per agreement on the card. He claims to be an attorney for the company and threatens to sue in the highest courts until he secures the payment of the order.

When will people begin to study the "Safe Methods of Business" and learn that it is not safe to SIGN A PAPER FOR A STRANGER?

THE PATENT FENCE SWINDLE.

It is an old but true maxim, that "experience is an expensive teacher," but many will learn in no other way. The wire and picket fence combination is a good article for fencing gardens, etc., too expensive, however, for general use.

THE SWINDLE.

An agent, very nicely dressed, meets you in your garden or field, and shows you extensive engravings of the patent combination fence. He warrants the fence to be just as represented, 44 pickets to the rod, well painted, firmly fastened by six galvanized steel wires, etc. All of this he agrees to furnish at the low price of 20 cts. per rod.

After convincing you of the cheapness of the fence, which is easily done, he offers you a special discount to take the agency for your township, for which you are to advance your credit to the amount of \$128. After securing your note he sends you a sample of the fence. But you soon find that the fence cannot be made for any such price per rod, and you are out of the amount of credit advanced. The note has been sold, and after passing into the hands of an innocent party it can be collected.

1. CAUTION. The fence is a Patent Right Fraud. Any man who asks you to sign a note to secure an agency is a swindler, or is acting the part of a rascal for some one else.

2. If the fence was not a fraud, our hardware merchants would long ago have investigated it, and if a good thing, would have it in stock. It must be a poor concern that necessitates such an unbusiness-like introduction.

3. Whoever deals with an agent deals with him at his own risk, for an agency can be revoked at any time.

4. Most of those swindling contracts are for no specified time and consequently the agency can be terminated at the pleasure of the swindler.

5. Never sign a paper for an agent without satisfactory knowledge of his character, or of his business.



ALWAYS READ BEFORE SIGNING.

Among the pithy sayings of a well-known German philosopher and reader occurs the following: "Sign no paper without reading it." In these days of education, enlightenment and progress, such a caution would hardly seem necessary to any person in the full possession of his faculties; yet it is astonishing how many people there are, including good business men, who attach their signatures to papers or documents whose contents may have a serious bearing upon themselves or their affairs, with scarcely a glance at their contents. Carelessness in failing to acquaint themselves with the contents of a paper before signing it has worked incalculable harm to thousands of well intentioned people. It is a good thing, therefore, to bear in mind continuously the above quotation, particularly with respect to such papers as express or imply anything in the nature of a contract or a legal obligation.

THE LIGHTNING-ROD SWINDLE.

CONTRACT.

Naperville, July 3, 1891.

Mr. *F. J. Bechtold*, please erect at your earliest convenience your lightning rods on my *House* according to your rules, of which said *House* I am the owner, for which I agree to pay you cents per foot and \$3.00 for each point, \$4.00 each for vanes, \$5.00 each for arrows, \$1.50 each for balls, and \$2.00 for braces, cash, when completed, or a note due on the first day of *January* next, 1892.

F. Hauswirth.

A GOOD LIGHTNING ROD PROPERLY APPLIED IS THE
CHEAPEST AND BEST INSURANCE KNOWN.

1. In the blank for cents....., the canvasser or agent puts in some single figure, say 7, that being understood to be the regular price per foot, but after the contract is signed, the agent at his leisure quietly inserts a 6 before the 7, or some other figure, making the amount 67 cents per foot instead of 7 cents, as signed and agreed upon.

2. A swindling note is generally obtained, and the contract is kept in the background ; but when the collector comes along and presents the note backed by the contract in plain figures, the farmer sees that he *himself has been struck by lightning* while trying to protect his house.

3. The note is generally in the hands of an innocent party, and according to law may be collected.

4. The agent canvassing the victim generally promises that the rodding of the house shall not cost over \$28.00 or \$35.00. But that man, however, never appears on the scene again.

5. Never deal with irresponsible persons. If you desire rods, employ your hardware merchants ; or if you desire anything in the machinery line, patronize honest and trusted dealers, and take no chances of "being taken in."

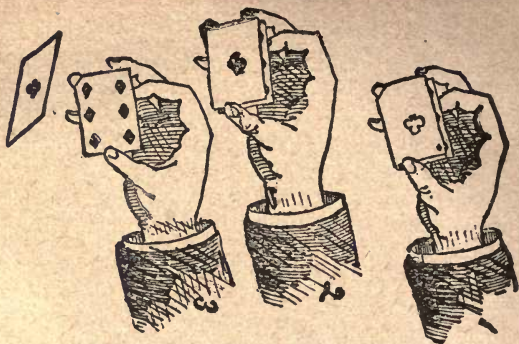
THE FARM-MACHINERY SWINDLE.

The latest scheme for fleecing unwary farmers is as follows: A plausible, well-dressed fellow drives up to the farmer's house with two or three different kinds of farm-machinery, and asks permission to store his machines in the farmer's barn, and the accommodating farmer usually gives permission.

After the machines are stored away, the sharper remarks that they are the last of a large lot that he has been selling through the country, and that he is anxious to close out the consignment, and if the farmer will sell two or more of the machines while they are stored in the barn, he shall have 50 per cent, commission on the sale. The offer is a tempting one, and the farmer usually accepts. He is then requested, merely as a business form, to affix his signature to a document, specifying the terms on which the machines are stored on the premises. The farmer signs a lengthy printed document without reading it, or perhaps, if read, without understanding it. At the expiration of 30 days he is astounded by finding himself called upon by another stranger to pay an exorbitant price for the machines stored in his barn. When the farmer objects, he is shown his signature attached to an agreement, which agreement, his lawyer tells him, is drawn in good legal form.

The victims of this game usually lose from \$200.00 to \$500.00.





THE CARD SWINDLER'S TRICKS.

How People Lose their Hard-Earned Money.

1. **THE THREE-CARD MONTE TRICK.** The three-card monte game is, of course, the old one and the best one known to get the greenhorn's money.

2. There are gamblers who make from twenty-five to fifty thousand dollars a year in playing this game, and this amount all comes from the innocent and unsuspecting people who think they have got a snap and try to make something because they think they have the advantage, but on the contrary are always taken in themselves.

3. The successful three-card monte player generally appears in the disguise of a farmer or cattle man, he speaks in the farmer's tone and acts in the farmer's manner and is dressed in the farmer's style. He appears ignorant and manifests more or less intoxication. Generally has his pockets full of rolls of money.

4. **THE GAME.** The cards are three in number and are made especially stiff so that they will hold a corner when turned.

5. **THE CAPPER.** Every monte player has a capper. A capper is a green ignorant looking man who always plays the game and wins a great deal of money. This is done to induce others to play the game. The capper and gamblers are generally in partnership.

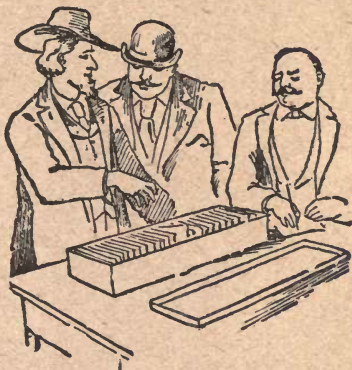
6. The first turn the capper wins. Then he turns the corner of a card when the player is not looking, and his friend think-

ing he has a sure thing bets on the card. In manipulating them the player flattens that card, with some sleight of hand movement and turns the corner of another. The betting man of course picks up the wrong card and loses his money.

7. The capper sometimes marks the card by putting a wet spot on it, and the man who bets on that card finds that the spot from the right card has been wiped off and the spot put on another card by the same sort of a sleight-of-hand performance.

8. There are some three-card monte players that are such experts at the game that the capper will tear off the corner of a card, and the innocent farmer betting on the card thus marked finds it has been turned under the corner of another card and the corner of the right card is covered up with the corner of another card.

9. BEWARE. The man who is fooling with cards and offering to bet is not fooling away his money. You will never win anything in that way. Do not try to get something for nothing and think you have a snap; for if you play the game with some one else you will soon become a wiser but a poorer man.



THE ENVELOPE SWINDLE.

1. The envelopes filling an ordinary box each have slips inclosed marked with numbers corresponding with numbers in a show case. There are generally numerous cappers around a game of this kind who play and win large prizes.

2. Many of the envelopes contain a double ticket and the man who plays the game generally opens the envelopes himself when there is nothing at stake and shows you the winning number, but when you draw it he will show you the other slip that contains the other number and you are the loser.

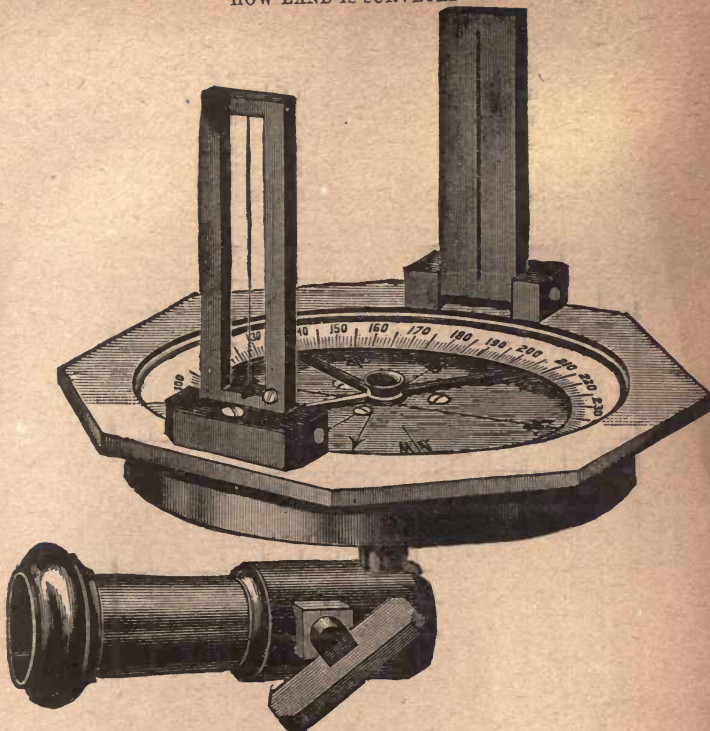
3. Many of these players give a lot of brass or silver washed prizes that are worth about two or three cents apiece.

4. If you desire to make money, remember that the man who plays games does not go around the country giving away money, but they are generally the sharpest and shrewdest of gamblers, and if you desire to be safe have nothing to do with them, and remember, "*that an honest man never gambles.*"

FICTITIOUS NAMES OF STATES.

Wisconsin—Badger State.
 Massachusetts—Bay State.
 Mississippi—Bayou State.
 Arkansas—Bear State.
 Louisiana—Creole State.
 Delaware—Diamond State.
 New York—Empire State. Excel-
 sior State.
 Connecticut—Freestone State.
 New Hampshire—Granite State.
 Vermont—Green Mountain State.
 Iowa—Hawkeye State.
 Indiana—Hoosier State.
 Pennsylvania—Keystone State.

Michigan—Lake State.
 Texas—Lone Star State.
 Maine—Lumber State. Pine-tree
 State.
 Virginia—Mother of Presidents.
 Mother of States.
 Connecticut—Nutmeg State.
 Massachusetts—Old Colony.
 Virginia—Old Dominion.
 North Carolina—Old North State.
 South Carolina—Palmetto State.
 Florida—Peninsula State.
 Illinois—Prairie State.
 North Carolina—Turpentine State.



A COMPASS FOR SURVEYING LAND.

HOW LAND IS SURVEYED.

1. HISTORY. Thomas Jefferson and Albert Gallatin are supposed to be the authors of our system of United States land surveys.

2. TOWNSHIPS. The land is first divided into squares by lines, six miles apart. These squares are called *townships*, and a row of townships running north and south is called a *range*. Townships are given proper names but for the purpose of location, they are designated by numbers.

3. **PRINCIPAL MERIDIANS AND BASE LINES.** First the surveyors select some prominent object or point, and drawing a straight line, north and south, through this point, make what is known as the *principal meridian line*. Then drawing a line at right angles across the *principal meridian* they establish what is called a *base line*. Marks one-half mile apart are left on each of these lines throughout their entire length.

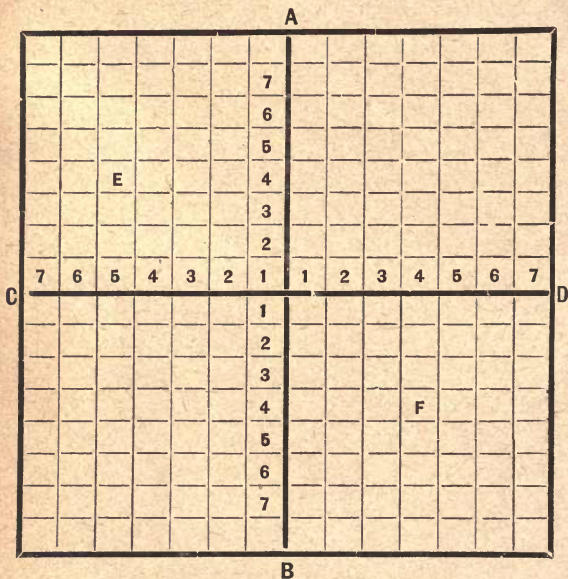


Illustration: A. B. = Principal Meridian. C. D. = Base Line. The numbers on the line A. B. mark the *township lines*, and the numbers on the line C. D. mark the *range lines*.

Range lines are run north and south six miles apart on both sides of the principal meridian and numbered as shown in diagram above. Township lines are run six miles apart, parallel to the base line and numbered as shown above.

Example: E. is in range 5, west, and in township 4, north,

or 30 miles west from the principal meridian and 24 miles north of the base line (each square represents a township six miles each way). F. is in range 4, east, and is in township 4, south, or 24 miles east of the principal meridian and 18 miles south of the base line.

How to Locate Land and Read and Write Descriptions.

A Township is 36 sections, each a mile square. A section is 640 acres. A quarter section, half a mile square, is 160 acres. An eighth section, half a mile long, north and south, and a quarter of a mile wide, is 80 acres. A sixteenth section, a quarter of a mile square, is 40 acres.

<i>NORTH</i>					
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
<i>SOUTH</i>					

A TOWNSHIP WITH SECTION LINES.

1. United States survey ends with the location of the section lines. Marks are, however, made by the surveyors at the corners of the section and also half-mile marks between the corners. By these marks any piece of land may be accurately located.

2. Land is generally bought and sold in lots of 40 acres, or 80 acres, or 120 acres, or 160 acres, etc.

640 ACRES.

A	B		
B	D		
	Z	X	Y

SEC. 25.

Example: Lots A. B. C. and D. taken together are one fourth of the entire section, and described as the N. W. $\frac{1}{4}$ of Sec. 25.

A. is described as N. W. $\frac{1}{4}$ of N. W. $\frac{1}{4}$ of Sec. 25.

C. D. is described as S. $\frac{1}{2}$ of N. W. $\frac{1}{4}$ of Sec. 25.

X. Y. is described as N. $\frac{1}{2}$ of S. E. $\frac{1}{4}$ of Sec. 25.

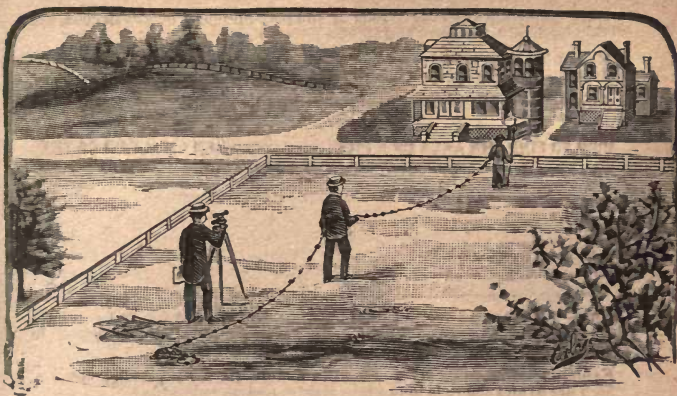
Z. is described as N. E. $\frac{1}{4}$ of S. W. $\frac{1}{4}$ of Sec. 25.

N. B.—Where the government surveys cannot be used, a full description has to be written out by the county surveyor.

The United States Homestead Laws.

The laws give to every citizen, and to those who have declared their intention to become citizens, the right to a homestead on SURVEYED lands to the extent of one-quarter section, or 160 acres; or a half-quarter section, or 80 acres; the former in cases in the class of lower priced lands, held by law at \$1.25 per acre, the latter of high priced lands, held at \$2.50 per acre, when disposed of to cash buyers. The pre-emption privilege is restricted to heads of families, widows, or single persons over the age of twenty-one.

Every soldier and officer in the army, and every seaman, marine and officer of the navy during the recent rebellion, may enter 160 acres from either class, and length of time served in the army or navy deducted from the time required to perfect title.



HOW TO MEASURE LAND AND TOWN LOTS.

FIG. 1.

RECTANGLE.

Rule to find the number of acres in a rectangular piece of land :
Multiply the length in rods by the breadth in rods, and divide by 160.

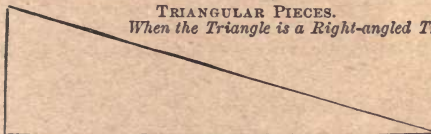
HOW TO MEASURE TOWN LOTS.

Rule.—Multiply the length in feet by the breadth in feet, and divide by 43,560 (the number of square feet in an acre).

TRIANGULAR PIECES.

When the Triangle is a Right-angled Triangle.

FIG. 2.

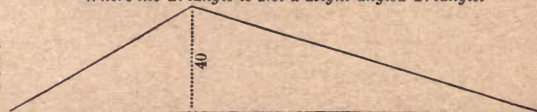


Rule—Multiply the width by the length, and divide by 2.

Example—How many acres of land in a triangular field 80 rods long and 40 rods wide? $80 \times 40 \div 2 = 1600$ sq. rods. $1600 \div 160 = 10$ acres. Ans.

Where the Triangle is Not a Right-angled Triangle.

FIG. 3.



If a triangle is without a right angle, a perpendicular has to be found.

Rule—Multiply the base in rods by the perpendicular height in rods, and divide by 2, and you have the area in square rods.

Example—How many acres in a triangular field whose base or side is 120 rods, and its width (perpendicular height) is 40 rods?

Solution: $120 \times 40 \div 2 = 2400$ sq. rods. $2400 \div 160 = 15$ acres. **Ans.**

HOW TO FIND THE AREA OF A PIECE OF LAND WHEN ONLY TWO OF THE OPPOSITE SIDES ARE PARALLEL.



Rule—Add the two parallel sides together, and divide by 2, and you have the average length. Then multiply the width in rods by the length in rods, and divide by 160, and you have the number of acres.

Example—How many acres of land in a field the two parallel sides of which are 60 and 100 rods long respectively, and 40 rods wide?

Solution: $60 + 100 \div 2 = 80$ sq. rods. $80 \times 40 \div 160 = 20$ acres. **Ans.**

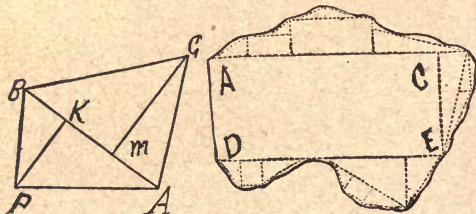


FIG. 5.

FIG. 6.

When land is irregular as in Figure 5, divide the field into triangles and use the rules under Figure 2 or 3.

When land is very irregular as in Figure 6, divide the field up into as many triangles and rectangles as may be necessary and apply the rules as given above.

HOW TO MEASURE TOWN LOTS.

Rule: Multiply the length in feet by the width in feet and divide the result by 43,560 and you will have the fractional part of an acre in the lot.

Example: What part of an acre is there in a lot 200 feet deep and 150 feet wide?

Solution: $200 \times 150 = 30,000$ sq. feet in the lot.

$\frac{30000}{43560}$ or about $\frac{3}{5}$ of an acre.

HOW TO LAY OFF SMALL LOTS OF LAND.

Farmers and gardeners often find it necessary to lay off small portions of land for the purpose of experimenting with different crops, fertilizers, etc. To such the following rules will be helpful:

One acre contains 160 sq. rods, or 4,840 sq. yards, or 43,560 sq. feet.

To measure off

One acre it will take $208\frac{7}{10}$ feet each way.

One-half acre it will take $147\frac{1}{2}$ feet each way.

One-third acre it will take $120\frac{1}{2}$ feet each way.

One-fourth acre it will take $104\frac{3}{8}$ feet each way.

One-eighth acre it will take $73\frac{3}{4}$ feet each way.



How to Calculate the WEIGHT of Coal in a Bin or Box.

A solid cubic foot of anthracite coal weighs about 93 pounds. When broken for use it weighs about 54 pounds. Bituminous coal when broken up for use weighs about 50 pounds.

Rule.—Multiply the length in feet by the height in feet, and again by the breadth in feet, and this result by 54 for anthracite coal, or by 50 for bituminous coal, and the result will equal the number of pounds.

To find the number of tons, divide by 2,000.

Example: A coal bin is ten feet long, 8 feet wide, and 5 feet high. How many tons of anthracite coal will it hold?

Solution: $10 \times 8 \times 5 \times 54 = 21,600$ $21,600 \div 2,000 = 10$ tons and 1,600 pounds.

Legal Hints and Helps Concerning Interest.

1. It is the general practice of the courts in this country to award interest computed at the legal rate, from the time when payment should have been made. Interest upon a judgment dates from the time the judgment is rendered.

2. A CREDITOR may charge interest on an account from the expiration of the time of credit. When no time is specified, interest may be charged from the time payment is demanded, or when the statement of account has been rendered.

3. A DEBT for board and lodging, where there was no fixed price or time of payment fixed, will not draw interest until it is reduced to judgment, or its amount otherwise determined. Interest may not be charged upon the items of a running account until the balance is struck, and the statement rendered.

4. COMPOUND interest cannot be collected by law. When interest has already accrued and become payable, an agreement that it shall be added to the principal thus formed, will generally be deemed legal. When such interest would not be recoverable upon an ordinary contract in which its payment was agreed upon, yet, if it has actually been paid, it cannot be recovered.

5. GUARDIANS, EXECUTORS and ADMINISTRATORS, and TRUSTEES of every kind, may be charged interest upon all trust funds in their hands after their failure to invest them within a reasonable time.

6. CUSTOM: Where it is a uniform practice of the seller to charge interest and this is known to the customer or purchaser at the time when the transaction takes place, interest may be charged on book accounts.

7. PARTNERS: If a partner withdraws money from the partnership funds belonging to the firm, for private use or for the purpose of speculation, he will be liable for *interest* on the money so withdrawn.

8. INSURANCE POLICY: When loss occurs under a policy of insurance, it bears interest from the time it is due according to the terms of the policy.



The Celebrated Lightning Method for Calculating Interest.

WHERE THE TIME IS FOR DAYS ONLY.

Rule—To find the interest on any given sum for any number of days, multiply the principal by the number of days, and divide as follows :

At 5 per cent., divide by 72

At 6 per cent., divide by 60

At 7 per cent., divide by 52

At 8 per cent., divide by 45

At 9 per cent., divide by 40

At 10 per cent., divide by 36

At 12 per cent., divide by 30

Example: What is the interest on \$900.00 for 8 days at 6 per cent.?

Solution: $900 \times 8 \div 60 = \$1.20$ interest.

WHEN THE TIME CONSISTS OF YEARS, MONTHS AND DAYS.

1. *Rule*.—Reduce years to months, adding the number of months, then place $\frac{1}{2}$ of the number of days to the right of the months with a decimal point between.

2. Then remove the decimal point two places to the left in the principal, and divide by 2, and the result will equal the interest for one month at 6 per cent.

3. Multiply the interest for one month by the number of months, and the product is the interest at 6 per cent. for the given time.

Then add $\frac{1}{6}$ of itself for 7 per cent.

“ “ $\frac{1}{3}$ of itself for 8 per cent.

“ “ $\frac{1}{2}$ of itself for 9 per cent.

“ “ $\frac{2}{3}$ of itself for 10 per cent.

Subtract $\frac{1}{6}$ of itself for 5 per cent.

“ $\frac{1}{3}$ of itself for 4 per cent.

Example: Find the interest on \$150, at 9 per cent. for 1 year, 4 months and 12 days.

Solution: $\$1.50 \div 2 = .75$ interest for 1 month, 1 year, 4 months and 12 days = 16.4 months.

$.75 \times 16.4 = \$12.30$, interest at 6 per cent.

$12.30 + 6.15 = \$18.45$, interest at 9 per cent.

N. B.—The \$6.15 is one-half of \$12.30.

Banker's Method of Calculating Interest.

In banking nearly all the business is transacted on the basis of 30, 60, and 90 days.

Rule.—To find the interest on any amount at 60 days, remove the decimal point two places to the left, and you have the interest at 6 per cent.

Increase or diminish according as the time is increased or diminished.

For 90 days add $\frac{1}{2}$ of itself.

For 30 days divide by 2.

For 15 days divide by 4.

For 120 days multiply by 2.

Example: What is the interest on \$240 for 90 days at 6 per cent?

2.40 interest for 60 days.

1.20 interest for $\frac{1}{2}$ of 60 days, or 30 days.

3.60 interest for 90 days.

TIME TABLE.

Showing the number of days from any day in one month to the same day in any other.

From To	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Jan	365	31	59	90	120	151	181	212	243	273	304	334
Feb	334	365	28	59	89	120	150	181	212	242	273	303
March	306	337	365	31	61	92	122	153	184	214	245	275
April	275	306	334	365	30	61	91	122	153	183	21	244
May	245	276	304	335	365	31	61	92	123	153	184	214
June	214	245	273	304	334	365	30	61	92	122	153	183
July	184	215	243	274	304	335	365	31	62	92	123	153
Aug	153	184	212	243	273	304	334	365	31	61	92	122
Sept	122	153	181	212	242	273	303	334	365	30	61	91
Oct	92	123	151	182	212	243	273	304	335	365	31	61
Nov	61	92	120	151	181	212	242	273	304	334	365	30
Dec	31	6.	90	121	151	182	212	243	274	304	335	365

NOTE.—Find in the left-hand column the month from any day of which you wish to compute the number of days to the same day in any other month; then follow the line along until under the desired month, and you have the required number of days.

Example: How many days from May 17 to Nov. 17? 184 days. Ans.

HOW TO USE THE INTEREST TABLES.

1. The interest on any sum of money, and for any length of time, may be obtained, by adding to or doubling any certain sum, or length of time in the tables, viz: If the interest on a certain sum of money at eight per cent. for a given time should be \$28.00, one-half of \$28.00 or \$14.00 would equal the interest at 4%, etc.

2. If the interest at 6% should amount to \$26.00 on a certain sum of money for a given time, twice that amount or \$52.00 would equal the interest at 12%, etc.

3. The tables are computed on the principle of 360 days in a year, the rule adopted by bankers and merchants throughout the entire country.

4. When the fraction of interest is a half a cent or more, a whole cent is taken, but when less than a half cent, nothing is charged.

EXAMPLE :

To find the interest (\$1,108) for one year, three months and twenty-nine days, at 7%, according to table :

Interest on \$1,000, for 1 year, at 7 per cent.,	\$70.00
" " 100, " 1 " " 7 " "	7.00
" " 8, " 1 " " 7 " "	56
" " 1,000, " 3mths., " 7 " "	17.50
" " 100, " 3 " " 7 " "	1.75
" " 8, " 3 " " 7 " "	14
" " 1,000, " 29 days, " 7 " "	5.64
" " 100, " 29 " " 7 " "	56
" " 8, " 29 " " 7 " "	05

Interest on the amount.....\$103.20

INTEREST AT FIVE PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.01	\$.14
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.28
3 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.42
4 "	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.06	.56
5 "	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.07	.69
6 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.08	.83
7 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.10	.97
8 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.11	1.11
9 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.13	1.25
10 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.14	1.39
11 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.15	1.53
12 "	.00	.00	.01	.01	.01	.01	.01	.01	.01	.02	.17	1.67
13 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.18	1.81
14 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.19	1.94
15 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.21	2.08
16 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.22	2.22
17 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.24	2.36
18 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.25	2.50
19 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.26	2.64
20 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.28	2.78
21 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.29	2.92
22 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.31	3.06
23 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.32	3.19
24 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.33
25 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.35	3.47
26 "	.00	.01	.01	.01	.02	.02	.03	.03	.03	.04	.36	3.61
27 "	.00	.01	.01	.02	.02	.02	.03	.03	.03	.04	.38	3.75
28 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.39	3.80
29 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.40	4.03
1 Month.	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.17
2 "	.01	.02	.03	.03	.04	.05	.06	.07	.08	.13	.83	8.33
3 "	.01	.03	.04	.05	.06	.08	.09	.10	.11	.18	1.25	12.50
4 "	.02	.03	.05	.07	.08	.10	.12	.13	.15	.17	1.67	16.67
5 "	.02	.04	.06	.08	.10	.13	.15	.17	.19	.21	2.08	20.83
6 "	.03	.05	.08	.10	.13	.15	.18	.20	.23	.25	2.50	25.00
7 "	.03	.06	.09	.12	.15	.18	.20	.23	.26	.29	2.92	29.17
8 "	.03	.07	.10	.13	.17	.20	.23	.27	.30	.33	3.33	33.33
8 "	.04	.08	.11	.15	.19	.23	.26	.30	.34	.38	3.75	37.50
10 "	.04	.08	.13	.17	.21	.25	.29	.33	.38	.42	4.17	41.67
11 "	.05	.09	.14	.18	.23	.28	.32	.37	.41	.46	4.58	45.83
1 Year.	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	5.00	50.00

INTEREST AT SIX PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.02	\$.17
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.33
3 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.05	.50
4 "	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.07	.67
5 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.08	.83
6 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.10	1.00
7 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.12	1.17
8 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.13	1.33
9 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.15	1.50
10 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.17	1.67
11 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.18	1.83
12 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.20	2.00
13 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.22	2.17
14 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.23	2.33
15 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.25	2.50
16 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.27	2.67
17 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.28	2.83
18 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.30	3.00
19 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.32	3.17
20 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.33
21 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.04	.35	3.50
22 "	.00	.01	.01	.01	.02	.02	.03	.03	.03	.04	.37	3.67
23 "	.00	.01	.01	.02	.02	.02	.03	.03	.03	.04	.38	3.83
24 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.40	4.00
25 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.17
26 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.43	4.33
27 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.45	4.50
28 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.67
29 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.48	4.83
1 Month.	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.50	5.00
2 "	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10	1.00	10.00
3 "	.02	.03	.05	.06	.08	.09	.11	.12	.14	.15	1.50	15.00
4 "	.02	.04	.06	.08	.10	.12	.14	.16	.18	.20	2.00	20.00
5 "	.03	.05	.08	.10	.13	.15	.18	.20	.23	.25	2.50	25.00
6 "	.03	.06	.09	.12	.15	.18	.21	.24	.27	.30	3.00	30.00
7 "	.04	.07	.11	.14	.18	.21	.25	.28	.32	.35	3.50	35.00
8 "	.04	.08	.12	.16	.20	.24	.28	.32	.36	.40	4.00	40.00
9 "	.05	.09	.14	.18	.23	.27	.32	.36	.41	.45	4.50	45.00
10 "	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	5.00	50.00
11 "	.06	.11	.17	.22	.28	.33	.39	.44	.50	.55	5.50	55.00
1 Year.	.06	.12	.18	.24	.30	.36	.42	.48	.54	.60	6.00	60.00

INTEREST AT SEVEN PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.02	\$.19
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.39
3 "	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.06	.58
4 "	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.08	.78
5 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.10	.97
6 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.12	1.17
7 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.14	1.36
8 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.16	1.56
9 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.18	1.75
10 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.19	1.94
11 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.21	2.14
12 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.23	2.33
13 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.25	2.53
14 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.27	2.72
15 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.29	2.92
16 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.31	3.11
17 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.31
18 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.04	.35	3.50
19 "	.00	.01	.01	.01	.02	.02	.03	.03	.03	.04	.37	3.69
20 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.39	3.89
21 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.41	4.08
22 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.43	4.28
23 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.04	.45	4.47
24 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.67
25 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.49	4.86
26 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.51	5.06
27 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.53	5.25
28 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.54	5.44
29 "	.01	.01	.02	.02	.03	.03	.04	.05	.05	.05	.56	5.64
1 Month.	.01	.01	.02	.02	.03	.04	.04	.05	.05	.06	.58	5.83
2 "	.01	.02	.04	.05	.06	.07	.08	.09	.11	.12	1.17	11.67
3 "	.02	.04	.05	.07	.09	.11	.12	.14	.16	.18	1.75	17.50
4 "	.02	.05	.07	.09	.12	.14	.16	.19	.21	.23	2.33	23.33
5 "	.03	.06	.09	.12	.15	.18	.20	.23	.26	.29	2.92	29.17
6 "	.04	.07	.11	.14	.18	.21	.25	.28	.32	.35	3.50	35.00
7 "	.04	.08	.12	.16	.20	.25	.29	.33	.37	.41	4.08	40.83
8 "	.05	.09	.14	.19	.23	.28	.33	.37	.42	.47	4.67	46.67
9 "	.05	.11	.16	.21	.26	.32	.37	.42	.47	.53	5.25	52.50
10 "	.06	.12	.18	.23	.29	.35	.41	.47	.53	.58	5.83	58.33
11 "	.06	.13	.19	.26	.32	.39	.45	.51	.58	.64	6.42	64.17
1 Year.	.07	.14	.21	.28	.35	.42	.49	.56	.63	.70	7.00	70.00

INTEREST AT EIGHT PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.02	\$.22
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.44
3 "	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.07	.67
4 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.09	.89
5 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.11	1.11
6 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.13	1.33
7 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.16	1.56
8 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.18	1.78
9 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.20	2.00
10 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.22	2.22
11 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.24	2.44
12 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.27	2.67
13 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.29	2.89
14 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.31	3.11
15 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.33
16 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.04	.36	3.56
17 "	.00	.01	.01	.02	.02	.02	.03	.03	.03	.04	.38	3.78
18 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.40	4.00
19 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.22
20 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.04	.44	4.44
21 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.67
22 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.49	4.89
23 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.51	5.11
24 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.53	5.33
25 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.06	.56	5.56
26 "	.01	.01	.02	.02	.03	.03	.04	.05	.05	.06	.58	5.78
27 "	.01	.01	.02	.02	.03	.04	.04	.05	.05	.06	.60	6.00
28 "	.01	.01	.02	.02	.03	.04	.04	.05	.06	.06	.62	6.22
29 "	.01	.01	.02	.03	.03	.04	.05	.05	.06	.06	.64	6.44
1 Month.	.01	.01	.02	.03	.03	.04	.05	.05	.06	.07	.67	6.67
2 "	.01	.03	.04	.05	.07	.08	.09	.11	.12	.13	1.33	13.33
3 "	.02	.04	.06	.08	.10	.12	.14	.16	.18	.20	2.00	20.00
4 "	.03	.05	.08	.11	.13	.16	.19	.21	.24	.27	2.67	26.67
5 "	.03	.07	.10	.13	.17	.20	.23	.27	.30	.33	3.33	33.33
6 "	.04	.08	.12	.16	.20	.24	.28	.32	.36	.40	4.00	40.00
7 "	.05	.09	.14	.19	.23	.28	.33	.37	.42	.47	4.67	46.67
8 "	.05	.11	.16	.21	.27	.32	.37	.43	.48	.53	5.33	53.33
9 "	.06	.12	.18	.24	.30	.36	.42	.48	.54	.60	6.00	60.00
10 "	.07	.13	.20	.27	.33	.40	.47	.53	.60	.67	6.67	66.67
11 "	.07	.15	.22	.29	.37	.44	.51	.59	.66	.73	7.33	73.33
1 Year.	.08	.16	.24	.32	.40	.48	.56	.64	.72	.80	8.00	80.00

INTEREST AT NINE PER CENT.

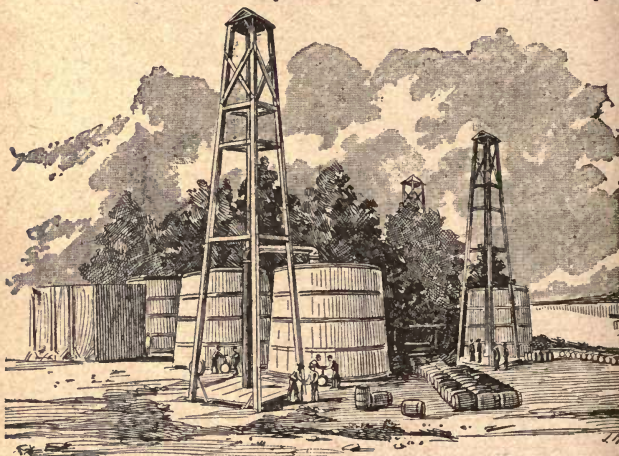
TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.02	\$.25
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.50
3 "	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.08	.75
4 "	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.10	1.00
5 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.12	1.25
6 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.02	.15	1.50
7 "	.00	.00	.00	.01	.01	.01	.01	.01	.02	.02	.17	1.75
8 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.20	2.00
9 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.23	2.25
10 "	.00	.00	.01	.01	.01	.02	.02	.02	.02	.02	.25	2.50
11 "	.00	.00	.01	.01	.01	.02	.02	.02	.02	.03	.27	2.75
12 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.30	3.00
13 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.32	3.25
14 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.35	3.50
15 "	.00	.01	.01	.02	.02	.02	.03	.03	.03	.04	.38	3.75
16 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.40	4.00
17 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.25
18 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.45	4.50
19 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.75
20 "	.00	.01	.01	.02	.02	.03	.03	.04	.05	.05	.50	5.00
21 "	.00	.01	.01	.02	.03	.03	.04	.04	.05	.05	.53	5.25
22 "	.00	.01	.01	.02	.03	.03	.04	.04	.05	.05	.55	5.50
23 "	.00	.01	.02	.02	.03	.03	.04	.05	.05	.06	.57	5.75
24 "	.01	.01	.02	.02	.03	.03	.04	.05	.05	.06	.60	6.00
25 "	.01	.01	.02	.02	.03	.04	.04	.05	.06	.06	.62	6.25
26 "	.01	.01	.02	.03	.03	.04	.05	.05	.06	.06	.65	6.50
27 "	.01	.01	.02	.03	.03	.04	.05	.05	.06	.07	.68	6.75
28 "	.01	.01	.02	.03	.03	.04	.05	.06	.06	.07	.70	7.00
29 "	.01	.01	.02	.03	.03	.04	.05	.06	.06	.07	.72	7.25
1 Month.	.01	.02	.02	.03	.04	.05	.05	.06	.07	.08	.75	7.50
2 "	.02	.03	.05	.06	.08	.09	.11	.12	.14	.15	1.50	15.00
3 "	.02	.05	.07	.09	.11	.14	.16	.18	.20	.23	2.25	22.50
4 "	.03	.06	.09	.12	.15	.18	.21	.24	.27	.30	3.00	30.00
5 "	.04	.08	.11	.15	.19	.23	.26	.30	.34	.38	3.75	37.50
6 "	.05	.09	.14	.18	.23	.27	.32	.36	.41	.45	4.50	45.00
7 "	.05	.11	.16	.21	.26	.32	.37	.42	.47	.53	5.25	52.50
8 "	.06	.12	.18	.24	.30	.36	.42	.48	.54	.60	6.00	60.00
9 "	.06	.14	.20	.27	.33	.41	.47	.54	.60	.68	6.75	67.50
10 "	.08	.15	.23	.30	.38	.45	.53	.60	.68	.75	7.50	75.00
11 "	.08	.17	.24	.33	.41	.50	.57	.66	.74	.83	8.25	82.50
1 Year.	.09	.18	.27	.36	.45	.54	.63	.72	.81	.90	9.00	90.00

INTEREST AT TEN PER CENT.

TIME.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day.	.00	.00	.00	.00	.00	.00	.00	.00	.00	\$.00	\$.03	\$.28
2 "	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.06	.56
3 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.08	.83
4 "	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.11	1.11
5 "	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.14	1.39
6 "	.00	.00	.01	.01	.01	.01	.01	.01	.02	.02	.17	1.67
7 "	.00	.00	.01	.01	.01	.01	.01	.02	.02	.02	.19	1.94
8 "	.00	.00	.01	.01	.01	.01	.02	.02	.02	.02	.22	2.22
9 "	.00	.01	.01	.01	.01	.02	.02	.02	.02	.03	.25	2.50
10 "	.00	.01	.01	.01	.01	.02	.02	.02	.03	.03	.28	2.78
11 "	.00	.01	.01	.01	.02	.02	.02	.02	.03	.03	.31	3.06
12 "	.00	.01	.01	.01	.02	.02	.02	.03	.03	.03	.33	3.33
13 "	.00	.01	.01	.01	.02	.02	.03	.03	.03	.04	.36	3.61
14 "	.00	.01	.01	.02	.02	.02	.03	.03	.04	.04	.39	3.89
15 "	.00	.01	.01	.02	.02	.03	.03	.03	.04	.04	.42	4.17
16 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.04	.44	4.44
17 "	.00	.01	.01	.02	.02	.03	.03	.04	.04	.05	.47	4.72
18 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.50	5.00
19 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.05	.53	5.28
20 "	.01	.01	.02	.02	.03	.03	.04	.04	.05	.06	.56	5.56
21 "	.01	.01	.02	.02	.03	.04	.04	.05	.05	.06	.58	5.83
22 "	.01	.01	.02	.02	.03	.04	.04	.05	.06	.06	.61	6.11
23 "	.01	.01	.02	.03	.03	.04	.04	.05	.06	.06	.64	6.39
24 "	.01	.01	.02	.03	.03	.04	.05	.05	.06	.07	.67	6.67
25 "	.01	.01	.02	.03	.03	.04	.05	.06	.06	.07	.69	6.94
26 "	.01	.01	.02	.03	.04	.04	.05	.06	.07	.07	.72	7.22
27 "	.01	.02	.02	.03	.04	.05	.05	.06	.07	.08	.75	7.50
28 "	.01	.02	.02	.03	.04	.05	.05	.06	.07	.08	.78	7.78
29 "	.01	.02	.02	.03	.04	.05	.06	.06	.07	.08	.81	8.06
1 Month.	.01	.02	.03	.03	.04	.05	.06	.07	.08	.08	.83	8.33
2 "	.02	.03	.05	.07	.08	.10	.12	.13	.15	.17	1.67	16.67
3 "	.03	.05	.08	.10	.13	.15	.18	.20	.23	.25	2.50	25.00
4 "	.03	.07	.10	.13	.17	.20	.23	.27	.30	.33	3.33	33.33
5 "	.04	.08	.13	.17	.21	.25	.29	.33	.38	.42	4.17	41.67
6 "	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	5.00	50.00
7 "	.06	.12	.18	.23	.29	.35	.41	.47	.53	.58	5.83	58.33
8 "	.07	.13	.20	.27	.33	.40	.47	.53	.60	.67	6.67	66.67
9 "	.08	.15	.23	.30	.38	.45	.53	.60	.68	.75	7.50	75.00
10 "	.08	.17	.25	.33	.42	.50	.58	.67	.75	.83	8.33	83.33
11 "	.09	.18	.28	.37	.46	.55	.64	.73	.83	.92	9.17	91.67
1 Year.	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	10.00	100.00

Time at which Money Doubles at Interest.

<i>Rate per cent.</i>	<i>Simple Interest.</i>	<i>Compound Interest.</i>
2.....	50 years.	35 years 1 day.
2½.....	40 years.	28 years 26 days.
3.....	33 years 4 months.	23 years 164 days.
3½.....	28 years 208 days.	20 years 54 days.
4.....	25 years.	17 years 246 days.
4½.....	22 years 81 days.	15 years 273 days.
5.....	20 years.	15 years 75 days.
6.....	16 years 8 months.	12 years 327 days.
7.....	14 years 104 days.	10 years 89 days.
8.....	12½ years.	9 years 2 days.
9.....	11 years 40 days.	8 years 16 days.
10.....	10 years.	7 years 100 days.



OIL WELLS OF THE STANDARD OIL TRUST.
TRUSTS.

What Trusts are, and How they are Organized.

1. The name is certainly innocent, but the abuses and wrongs growing out of it are alarming

2. It is organized or brought about in the following way. A majority of those dealing in, or manufacturing special or certain articles unite their capital and form a corporation, with a capital of two or three times that actually invested in

the business. Thus the capital stock of each individual or corporate member of the trust is doubled without the investment of an additional dollar. When this is done, the corporation is so managed that it pays on this doubled or trebled capital stock dividends as great or greater than the earnings before secured separately.

3. The "Trust" has absolute command of the product which it is formed to control, so that it is able to name its price and profits.

4. If the supply is too large, certain of the mills or factories or refineries in the association are closed, and the owners can make no objections because they are partners in the scheme, and are sure of their dividends on two or three times the capital they had invested in their former business. Reducing the production only makes their dividends more certain.

5. OBJECT.—It is very easily seen that the "trust" is but a dishonest device to destroy competition, and to swell the profits of the manufacturers, or operators, or dealers, without a dollar of additional capital being put into the business.

6. RESULT.—The results are, that the consumer pays the increased profits of the bogus capital of the corporation, and the producer has to accept for his products just what the managers of the "trust" choose to pay.

7. ROBBERY.—It is organized robbery, and nothing less, and should be treated by our courts the same as any other stealing.



Interest Laws of the United States and Canada.

STATES AND TERRITORIES.	PENALTY OF USURY.	Legal.	SPECIAL.
Alabama.....	Loss of interest.....	8	
Arizona.....	No penalty.....	10	No limit.
Arkansas.....	Forfeiture of principal and interest.....	6	10 per ct.
California.....	No penalty.....	10	No limit.
Colorado.....	" ".....	8	"
Connecticut.....	" ".....	6	6 per ct.
Delaware.....	" ".....	6	6 per ct.
Dist. of Col.....	" " all interest.....	6	10 per ct.
Florida.....	No penalty.....	8	No limit.
Georgia.....	Forfeiture of all interest.....	7	8 per ct.
Idaho.....	Forfeiture of three times the excess of interest over 18 per cent.*.....	10	18 per ct.
Illinois.....	Forfeiture of all interest.....	5	7 per ct.
Indiana.....	" " interest over 6 per cent.....	6	8 per ct.
Iowa.....	" " interest and costs.....	6	8 per ct.
Kansas.....	" " twice the excess of interest.....	6	10 per ct.
Kentucky.....	" " twice of interest.....	6	6 per ct.
Louisiana.....	" " interest.....	5	8 per ct.
Maine.....	No penalty.....	6	No limit.
Maryland.....	Forfeiture of excess.....	6	6 per ct.
Massachusetts.....	No penalty—6 per cent. on judgments.....	6	No limit.
Michigan.....	Forfeiture of excess.....	7	10 per ct.
Minnesota.....	Forfeiture of contract if more than 10 per cent. is charged.....	7	10 per ct.
Mississippi.....	Forfeiture of interest over 10 per cent.....	6	10 per ct.
Missouri.....	Forfeiture of all interest.....	6	8 per ct.
Montana.....	No penalty.....	10	No limit.
Nebraska.....	Forfeiture of all interest and costs.....	7	10 per ct.
Nevada.....	No penalty.....	10	No limit.
N. Hampshire.....	Forfeiture of three times excess of interest.....	6	6 per ct.
New Jersey.....	Forfeiture of all interest and costs.....	6	6 per ct.
New Mexico.....	No penalty.....	6	No limit.
New York.....	Forfeiture of contract.†.....	6	6 per ct.
North Carolina.....	Forfeiture of double the amount of interest.....	6	8 per ct.
North Dakota.....	Forfeiture of interest.†.....	7	12 per ct.
Ohio.....	Forfeiture of excess.....	6	8 per ct.
Oregon.....	" " principal, interest and costs.....	10	12 per ct.
Pennsylvania.....	" " excess, Act of 1858.....	6	6 per ct.
Rhode Island.....	" " unless by contract.†.....	6	No limit.
South Carolina.....	" " of all the interest.....	7	7 per ct.
South Dakota.....	Forfeiture of interest.†.....	7	12 per ct.
Tennessee.....	" " of excess over 6 per cent.....	6	6 per ct.
Texas.....	" " of all interest.....	8	12 per ct.
Utah.....	No penalty.....	10	No limit.
Vermont.....	Forfeiture of excess on R. R. bonds.....	6	7 per ct.
Virginia.....	" " interest.....	6	
Washington.....	No penalty.....	10	No limit.
West Virginia.....	Forfeiture of excess.....	6	6 per ct.
Wisconsin.....	" " all interest.....	7	10 per ct.
Wyoming.....	No penalty.....	10	No limit.
Canada.....		6	No limit.
New Brunswick.....		6	"
Nova Scotia.....		6	"

* Act of Feb. 21, 1879.

† Also punishable as a misdemeanor.

‡ Also 6 per cent. on judgments.



THE APPLICATION OF COMPOUND INTEREST.

Direct compound interest is illegal in all the States. But every man that loans his money and keeps it out at a legal rate of interest, receives and makes a compound rate of interest. He annually collects his interest, and that in turn loaned out again makes an accumulation equal to a regular compound rate of interest.

EXAMPLE:—If Captain Newport, at his first landing at Jamestown, Virginia, in 1607, had loaned out \$100 at compound interest, it would now equal a sum greater than the entire wealth of the United States.

COMPOUND INTEREST TABLE.

Showing the amount of \$1 from 1 to 15 years at compound interest, interest added semi-annually, at different rates. This table will be found valuable in computing interest on Savings Bank deposits, &c.

YEARS	3	4	5	6	7	8	10
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
$\frac{1}{2}$	1.015000	1.020000	1.025000	1.030000	1.035000	1.040000	1.050000
1	1.030225	1.040400	1.050625	1.060900	1.071225	1.081600	1.102500
$1\frac{1}{2}$	1.045678	1.061208	1.076890	1.092727	1.108718	1.124864	1.157625
2	1.061363	1.082432	1.103813	1.125509	1.147523	1.169858	1.215506
$2\frac{1}{2}$	1.077284	1.104081	1.131408	1.159274	1.187686	1.216653	1.276281
3	1.093443	1.126162	1.159693	1.194052	1.229255	1.265319	1.340095
$3\frac{1}{2}$	1.109845	1.148685	1.188685	1.229874	1.272279	1.315931	1.407100
4	1.126492	1.171659	1.218403	1.266770	1.316809	1.368569	1.477455
$4\frac{1}{2}$	1.143390	1.195092	1.248863	1.304773	1.363897	1.423312	1.551328
5	1.160541	1.218994	1.280084	1.343916	1.410598	1.480244	1.628894
$5\frac{1}{2}$	1.177949	1.243374	1.312086	1.384234	1.459969	1.539454	1.710339
6	1.195618	1.268241	1.344888	1.425761	1.511068	1.601032	1.795856
$6\frac{1}{2}$	1.213552	1.293606	1.378511	1.468533	1.563956	1.665073	1.885649
7	1.231755	1.319478	1.412973	1.512589	1.618694	1.731676	1.979931
$7\frac{1}{2}$	1.250232	1.345868	1.448298	1.557967	1.675349	1.800943	2.078928

COMPOUND INTEREST TABLE. — CONTINUED.

YEARS	3 Per Cent.	4 Per Cent.	5 Per Cent.	6 Per Cent.	7 Per Cent.	8 Per Cent.	10 Per Cent.
8	1.268985	1.372785	1.484505	1.604706	1.733986	1.872981	2.182874
8½	1.288020	1.400241	1.521618	1.652847	1.794675	1.947900	2.292019
9	1.307340	1.428246	1.559658	1.702433	1.857489	2.025816	2.406619
9½	1.326950	1.456811	1.598650	1.753506	1.922501	2.106849	2.526950
10	1.346855	1.485947	1.638616	1.806111	1.989789	2.191123	2.653297
10½	1.367058	1.515666	1.679581	1.860294	2.059431	2.278768	2.785962
11	1.387563	1.545980	1.721571	1.916103	2.131511	2.369919	2.925260
11½	1.408377	1.576899	1.764610	1.973586	2.206114	2.464715	3.071523
12	1.429503	1.608437	1.808726	2.032794	2.283328	2.563304	3.225100
12½	1.450945	1.640606	1.853944	2.093778	2.363245	2.665836	3.386355
13	1.472709	1.673418	1.900292	2.156591	2.445959	2.772470	3.555672
13½	1.494800	1.706886	1.947800	2.221289	2.531567	2.883368	3.733456
14	1.517222	1.741024	1.996595	2.287927	2.620172	2.998703	3.920129
14½	1.539980	1.775845	2.046407	2.356565	2.711878	3.118651	4.116135
15	1.563080	1.811361	2.097567	2.427262	2.806793	3.243397	4.321940

Example.—What will \$400. amount to in 8 years and 6 months at 4 per cent. compound interest, interest added semi-annually? Referring to table, it is found \$1. in 8 years and 6 months at 4 per cent. will amount to \$1.400241. The amount of \$400. will be 400 times this or \$560.0964.

NOTE.—If the interest only be wanted, deduct the principal \$400. from \$560.0964.

Possibilities of Compound Interest.

An Idaho correspondent sends the New York *Tribune* a photograph of an old Idaho mortgage, which shows in a startling way the amazing possibilities of compound interest. The mortgage was executed in 1861, on a piece of land in Boise City, "to secure the sum of \$340, if paid in legal tender, with interest, at the rate of 10 per cent. per month. But if the said note shall not be paid.....then the sum of \$170, with interest, at 10 per cent. per month, and if said interest is not paid at the time of maturity of this note, said interest to be added to the principal, and said principal and interest together shall draw interest per month as above stated." These conditions were evidently not fulfilled, for a note is appended to the document as follows: "The above mortgage is not satisfied, according to the records of Ada County. With interest on \$170, at 10 per cent. per month, compounded every six months, the debt would now amount to \$45,972,003,182,826.50." There are a great many millionaires in the country, but there is probably only one man in the world who is indebted in the sum of nearly forty-six trillions of dollars.



JAY GOULD.

How Money Grows at Interest.

If one dollar be invested and the interest added to the principal annually, at the rates named, we shall have the following result as the accumulation of one hundred years.

One dollar, 100 years at 1 per cent.....	\$2 $\frac{3}{4}$
One dollar, 100 years at 2 per cent.....	7 $\frac{1}{4}$
One dollar, 100 years at 3 per cent	19 $\frac{1}{4}$
One dollar, 100 years at 4 per cent	50 $\frac{1}{2}$
One dollar, 100 years at 5 per cent.....	131 $\frac{1}{2}$
One dollar, 100 years at 6 per cent	340
One dollar, 100 years at 7 per cent	868
One dollar, 100 years at 8 per cent	2,203
One dollar, 100 years at 9 per cent.....	5,513
One dollar, 100 years at 10 per cent	13,809
One dollar, 100 years at 12 per cent.....	84,675
One dollar, 100 years at 15 per cent	1,174,405
One dollar, 100 years at 18 per cent.....	15,145,000
One dollar, 100 years at 24 per cent	2,551,799,404



THE LAW OF NEWSPAPER SUBSCRIPTIONS.

1. There is no postal law regulating the transactions between publishers and subscribers. The ordinary rules of contract govern all relations between the parties concerned, and the post-office has no part except to deliver the article, or return it when ordered to do so.

2. If the publisher of any paper or periodical sends his paper or magazine, the Postmaster must deliver it, if the person to whom it is sent will take it. If he will not take it, the Postmaster must notify the publisher.

3. The publisher must collect his subscription the same as any other debt.

4. If a man subscribes for a paper or periodical for one year, he cannot stop his paper at any time during that year, but at the end of the year he can stop his paper, whether he has paid for it or not.

5. If at the end of the year the publisher continues to send his paper and the subscriber to receive it, the sending is the offer of another year's subscription at the same price, and the taking of the paper out of the post-office *is an acceptance*.

6. If a subscriber has by express or implied agreement become liable for another year's subscription, he cannot during and before the expiration of that year stop his paper, even by paying up all he owes to the publisher.

7. If the publisher advertises terms of subscription, all parties taking the paper under these conditions will be held according to the conditions.



HOW TO SEND MONEY BY MAIL.

BANK DRAFTS. A draft on some reliable bank is by far the best and most business-like way to send large amounts of money. It is safe, convenient, and cheap.

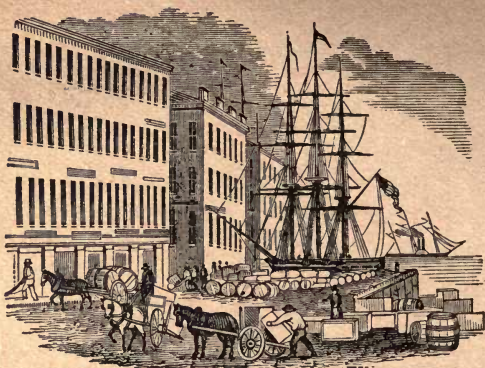
Better, however, have the draft issued in your favor (to your own order), and then indorse it, and make it payable to the party to whom you intend to send it. (See indorsement on page 61.)

POST OFFICE ORDER. By Post Office Order is also a safe and reliable way to send money. It costs a little more than to remit by draft, but it is equally as secure, and many times more convenient, because the Post Office is accessible at all hours of the day.

REGISTERED LETTERS. The Government promises special care in handling and transmitting a Registered Letter or Package, but should it be lost, the owner is the loser, and not the Government. Money sent by *Registered Letter is always at the risk of the sender.*

POSTAL NOTES. In sending small amounts of money the postal note very conveniently answers the purpose. But should it be lost or stolen, the sender has no remedy, for the Government does not assume any responsibility.

EXPRESS ORDERS. The Express Order, as to security, has all the advantages of the Bank Draft or Post Office Order. Serious disadvantages often arise, however, when the Express office on which the order is drawn has not the money on hand to pay it, consequently the holder of the order has to wait the slow action of the company's agents in getting the amount forwarded from some other office.



How to Send Money to Other Countries.

FOREIGN BILL OF EXCHANGE.

£40.

Chicago, Nov. 20, 1891.

Thirty days after sight of this first of exchange (second and third unpaid) pay to Anna Holverson Forty Pounds Sterling, with exchange on Chicago, and charge to my account.

To B. F. Lincoln,

F. C. Barnard.

Liverpool, Eng.

Money is generally sent from one country to another in the above form or draft, known as Foreign Bill of Exchange. They can be purchased at almost any national bank.

There are generally three drafts sent, as there are many dangers and delays in crossing the ocean. The first draft received is paid, and that cancels the remaining two.

How to Change English Money to Dollars and Cents.

Rule.—Reduce the pounds to shillings and add in the shillings, if any, and multiply the result by $24\frac{1}{2}$. If there are any pence, add in twice as many cents.

Example:—How many dollars in £20, 6s. and 6d.?

Solution:—£20 and 6s.=406s.

$$406s \times 24\frac{1}{2} = \$98.79\frac{1}{2}.$$

$$\$98.79\frac{1}{2} + 12 = \$98.91\frac{1}{2}. \quad \text{Ans.}$$

How to Reduce Dollars to Pounds.

Rule.—Multiply the Dollars by 15 and divide the result by 73, and you will have the number of pounds and the decimal of a pound.

Example:—How many pounds in \$467.20?

$$\text{Solution:—} \$467.20 \times 15 \div 73 = \text{£}96. \quad \text{Ans.}$$

INTERNATIONAL OR FOREIGN MONEY-ORDER FEES.

On Algeria, Belgium, British India, Cape Colony, Constantinople, Denmark, Dominion of Canada, Egypt, England, France, German Empire, Hong Kong, Ireland, Italy, Jamaica, Japan, Newfoundland, New South Wales, New Zealand, Portugal, Sandwich Islands, Scotland, Shanghai, Sweden, Switzerland, Tasmania, Victoria.

For sums not exceeding \$10..... 10 cents
 Over \$10, not exceed. \$20.....20 c. | Over \$30, not exceed. \$40.....40 c.
 Over \$20, not exceed. \$30.....30 c. | Over \$40, not exceed. \$50.....50 c.

Orders can also be obtained on Austria and the East Indies, by remittance through the Postal Department of Switzerland, subject to the rates of the Swiss Department to those countries. Also on Norway and the Netherlands, through the Postal Department of the German Empire, subject to the rates of the German Department to those countries.

No order issued for a larger amount than \$50 in U. S. money.



VALUE OF ANCIENT MONEY.

<i>Denomination.</i>	<i>Grains.</i>	<i>Gold Value.</i>
Gold Shekel.....	132	\$5.69
Gold Maneh.....	13,200	569.00
Gold Talent.....	1,320,000	56,900.00
Silver Gerah.....	11	.02 $\frac{1}{4}$
Silver Beka.....	110	.26 $\frac{1}{2}$
Silver Shekel.....	200	.53
Silver Maneh.....	13,200	32.00
Silver Talent.....	660,000	1,660.00
Copper Shekel.....	528	.03 14-100
Persian Daric or Dram (gold).....	128	5.52
Maccabæan Shekel (silver).....	220	.53
"Piece of Money" (stater silver).....	220	.53
Penny (Denarius, silver).....	58 6-7	.14
Farthing (Quadrans, copper).....	42	.001 $\frac{1}{4}$
Farthing (Assarium, copper).....	84	.001 $\frac{1}{2}$
Mite (copper).....	21	.001 $\frac{3}{8}$

THE VALUE OF FOREIGN GOLD AND SILVER COINS.

COUNTRY.	GOLD COINS.	Value	SILVER COINS.	Value
Australia	Pound of 1852.....	\$5.32	.....	.....
"	Sovereign of 1855-60.....	4.85	.....	.....
Austria	Ducat.....	2.28	Old rix dollar.....	\$1.02
"	Souverain.....	6.75	Old scudo.....	1.02
"	New Union Crown (assumed)	6.64	Florin before 1858.....	51
" .....	.....	.....	New florin.....	48
" .....	.....	.....	New Union dollar.....	73
" .....	.....	.....	Maria Theresa dollar, 1780.	1.02
Belgium.....	Twenty-five-francs.....	4.72	Five francs.....	98
Bolivia.....	Doubloon.....	15.59	New dollar.....	79
" .....	.....	.....	Half dollar.....	39
Brazil.....	Twenty milreis.....	10.90	Double milreis.....	1.02
Canada.....	.....	.....	Twenty cents.....	18
Central America.....	Two escudos.....	3.68	Dollar.....	1.00
Chili.....	Old doubloon.....	15.59	Old dollar.....	1.00
"	Ten pesos.....	9.15	New dollar.....	98
Denmark.....	Ten thaler.....	7.90	Two rigsdaler.....	1.10
Ecuador.....	Four escudos.....	7.55	.....	.....
England.....	Pound or sovereign, new.....	4.86	Shilling, new.....	22
"	Pound or sovereign, average.	4.84	Shilling, average.....	22
France.....	Twenty francs, new.....	3.85	Five franc, average.....	98
"	Twenty francs, average.....	3.84	.....	.....
Germany, North.	Ten thaler.....	7.90	Thaler, before 1857.....	72
"	Ten thaler, Prussian.....	7.97	New thaler.....	72
"	Krone (crown)	6.64	.....	.....
Germany, South.	Ducat.....	2.28	Florin, before 1857.....	41
" .....	.....	.....	New florin (assumed).....	41
Greece.....	Twenty drachms.....	3.44	Five drachms.....	88
Hindustan.....	Mohur.....	7.08	Rupee.....	46
Italy.....	Twenty lire.....	3.84	.....	.....
Japan.....	Old cobang.....	4.44	Itzebu.....	37
"	New cobang.....	3.57	New Itzebu.....	33
Mexico.....	Doubloon, average.....	15.52	Dollar, new.....	1.06
"	Doubloon, new.....	15.61	Dollar, average.....	1.06
Naples.....	Six ducati, new.....	5.04	Scudo.....	95
Netherlands.....	Ten guilders.....	3.99	Two-and-a-half guild.....	1.09
Norway.....	.....	.....	Specie daler.....	1.10
New Granada.....	Old doubloon, Bogota.....	15.61	Dollar f 1857.....	97
"	Old doubloon, Popayan.....	15.37	.....	.....
"	Ten pesos, new.....	9.67	.....	.....
Peru.....	Old doubloon.....	15.55	Old dollar.....	1.06
"	Twenty soles.....	19.21	Dollar of 1858.....	94
" .....	.....	.....	Half-dollar, 1835-38.....	38
Portugal.....	Gold Crown.....	5.80	.....	.....
Prussia.....	New Union Crown (assumed)	6.64	Thaler before 1857.....	72
" .....	.....	.....	New thaler.....	72
Romé.....	Two-and-a-half scudi, new.....	2.60	Scudo.....	1.05
Russia.....	Five roubles.....	3.97	Rouble.....	79
Sardinia.....	.....	.....	Five lire.....	98
Spain.....	One hundred reals.....	4.96	New pistareen.....	26
"	Eighty reals.....	3.86	.....	.....
Sweden.....	Ducat.....	2.23	Rix dollar.....	1.10
Switzerland.....	.....	.....	Two francs.....	39
Tunis.....	Twenty-five piastres.....	2.99	Five piastres.....	62
Turkey.....	One hundred piastres.....	4.36	Twenty piastres.....	86
Tuscany.....	Sequin.....	2.31	Florin.....	27



FOREIGN POSTAGE.

To all parts of the Universal Postal Union (embracing nearly every civilized country):

ON LETTERS, *five cents for each half ounce* or fraction thereof—prepayment optional. Double rates are collected on delivery of unpaid or short-paid letters.

On newspapers, books, pamphlets, photographs, sheet music, maps, engravings, and similar printed matter, *one cent for each two ounces* or fraction thereof.

TO CANADA (including Nova Scotia, New Brunswick, Manitoba and Prince Edward Island): LETTERS, *two cents for each ounce* or fraction thereof; Books, Circulars and similar printed matter, *one cent for each two ounces* or fraction thereof. SECOND CLASS MATTER, same as in the United States; SAMPLES and MERCHANDISE, *one cent per ounce*. Packages must not exceed 4lbs. 6 oz. in weight prepayment compulsory.

TO MEXICO: Letters, Postal Cards and printed matter, same rates as in the United States. SAMPLES, *one cent per ounce*; MERCHANDISE other than Samples can only be sent by Parcel Post.

TO AUSTRALIA (except New South Wales, Queensland and Victoria), *via San Francisco*: ON LETTERS, *five cents for each half ounce* or fraction thereof. To places excepted above, *twelve cents for each half ounce*; on NEWSPAPERS, *two cents each*—prepayment compulsory.

LIMITS OF SIZE AND WEIGHT: Packages of samples of merchandise to the countries named above (except Great Britain, France, Belgium and Switzerland), must not exceed $8\frac{3}{4}$ oz., nor measure more than 8 in. in length, 4 in breadth and two in depth; and packages of printed matter must not exceed 4lbs. 6 oz. Packages of merchandise samples to Great Britain, France, Belgium, Switzerland and Argentine Republic are limited to 12 oz. in weight, 12 in. in length, 8 in width, and four in depth. Packages of printed matter to Germany and Great Britain are limited to 2 ft. in length and 1 ft. in each other dimension.

Tables of Weights and Measures.

TROY WEIGHT.

24 grains make 1 pennyweight, 20 pennyweights make 1 ounce. By this weight gold, silver and jewels only are weighed. The ounce and pound in this, are same as in Apothecarys' weight.

APOTHECARYS' WEIGHT.

20 grains make one scruple, 3 scruples make 1 drachm, 8 drachms make 1 ounce 12 ounces make 1 pound.

AVOIRDUPOIS WEIGHT.

16 drachms make 1 ounce, 16 ounces make 1 pound, 25 pounds make 1 quarter, 4 quarters make 100-weight, 2,000 pounds make a ton.

DRY MEASURE.

2 pints make 1 quart, 8 quarts make 1 peck, 4 pecks make one bushel, 36 bushels make 1 chaldron.

LIQUID OR WINE MEASURE.

4 gills make 1 pint, 2 pints make 1 quart, 4 quarts make 1 gallon, $31\frac{1}{2}$ gallons make one barrel, 2 barrels make 1 hogshead.

TIME MEASURE.

60 seconds make 1 minute, 60 minutes make 1 hour, 24 hours make 1 day, 7 days make 1 week, 4 weeks make 1 lunar month, 28, 29, 30, or 31 days make 1 calendar month (30 days make 1 month in computing interest), 52 weeks and 1 day, or 12 calendar months, make 1 year, 365 days, 5 hours, 48 minutes and 49 seconds make 1 solar year.

CIRCULAR MEASURE.

60 seconds make 1 minute, 60 minutes make 1 degree, 30 degree make 1 sign, 90 degrees make 1 quadrant, 4 quadrants or 360 degrees make 1 circle.

LONG MEASURE—DISTANCE.

3 barleycorns 1 inch, 12 inches 1 foot, 3 feet 1 yard, $5\frac{1}{2}$ yards 1 rod, 40 rods 1 furlong, 8 furlongs one mile.

CLOTH MEASURE.

$2\frac{1}{2}$ inches 1 nail, 4 nails 1 quarter, 4 quarters 1 yard.

MISCELLANEOUS.

3 inches 1 palm, 4 inches 1 hand, 6 inches 1 span, 18 inches 1 cubit, 21.8 inches 1 Bible cubit, $2\frac{1}{2}$ feet 1 military pace.

SQUARE MEASURE.

144 square inches 1 square foot, 9 square feet 1 square yard, $30\frac{1}{4}$ square yards 1 square rod, 40 square rods 1 rood, 4 roods 1 acre, or 160 square rods one acre.

SURVEYOR'S MEASURE.

7.92 inches 1 link, 25 links 1 rod, 4 rods 1 chain, 10 square chains or 160 square rods, 1 acre, 640 acres one square mile.

CUBIC MEASURE.

1728 cubic inches 1 cubic foot, 27 cubic feet 1 cubic yard, 128 cubic feet 1 cc. (wood), 40 cubic feet 1 ton (shipping), 2150.42 cubic inches 1 standard bushel, 231 cubic inches 1 standard gallon, 1 cubic foot four-fifths of a bushel.

MISCELLANEOUS TABLE.

12 things make	.	.	.	.	.	1 dozen.
12 dozen make	.	.	.	.	.	1 gross.
12 gross make	.	.	.	.	.	1 great gross.
20 things make	.	.	.	.	.	1 score.
196 pounds of flour make	.	.	.	.	.	1 barrel.
200 pounds of beef or pork make	.	.	.	.	.	1 barrel.
135 pounds of potatoes or apples make	.	.	.	.	.	1 barrel.
280 pounds of salt make	.	.	.	.	.	1 barrel.
400 pounds of molasses make	.	.	.	.	.	1 barrel.
200 pounds of sugar make	.	.	.	.	.	1 barrel.
240 pounds of lime make	.	.	.	.	.	1 barrel.
100 pounds of fish make	.	.	.	.	.	1 quintal.
100 pounds of nails make	.	.	.	.	.	1 keg.
50 pounds of soap make	.	.	.	.	.	1 box.
20 pounds of raisins make	.	.	.	.	.	1 box.
2 pounds of cigars make	.	.	.	.	.	1 box.
20 pounds of soda make	.	.	.	.	.	1 box.
40 pounds of cheese make	.	.	.	.	.	1 box.
25 pounds of tobacco make	.	.	.	.	.	1 box.
62 pounds of tea make	.	.	.	.	.	1 box.
60 pounds of saleratus make	.	.	.	.	.	1 box.
25 pounds of chocolate make	.	.	.	.	.	1 box.
56 pounds of butter make	.	.	.	.	.	1 firkin.
5 pounds of spices make	.	.	.	.	.	1 can.
1100 pounds of rice make	.	.	.	.	.	1 tierce.
2150.42 cubic inches make	.	.	.	.	.	1 bushel.
231 cubic inches make	.	.	.	.	.	1 gallon.
14 pounds make	.	.	.	.	.	1 stone.
43560 feet make	.	.	.	.	.	1 acre.
100 square feet make	.	.	.	.	.	1 square.
5280 feet make	.	.	.	.	.	1 mile.
24¾ cubic feet make	.	.	.	.	.	1 perch of stone.
128 cubic feet make	.	.	.	.	.	1 cord.
140 lbs. of lime make	.	.	.	.	.	1 cask.

A CUBIC FOOT OF

	Pounds.		Pounds
Common soil weighs	124	Clay or stone weighs	160
Strong " "	127	Cork " "	15
Loose earth or sand " "	95	Tallow " "	59
Clay " "	135	Bricks " "	123
Lead " "	708¾	Marble " "	171
Copper " "	555	Granite " "	165
Wrought iron " "	486¾	Oak wood " "	55
Anthracite coal " "	50-55	Red pine " "	42
Bituminous " "	45-55	White pine " "	30

THE METRIC SYSTEM.

WEIGHTS.

<i>Metric Denominations and Values.</i>		<i>Equivalents in Denominations in use.</i>	
NAMES.	No. Grams.	Weight of what quantity of water at maximum density.	Avoirdupois Weight.
Millier or tonneau	= 1,000,000	= 1 cubic meter	= 2204.6 pounds.
Quintal	= 100,000	= 1 hectoliter	= 220.46 pounds.
Myriagram	= 10,000	= 10 liters	= 22.046 pounds.
Kilogram or kilo	= 1,000	= 1 liter	= 2.2046 pounds.
Hectogram	= 100	= 1 deciliter	= 3.5274 ounces.
Dekagram	= 10	= 10 c. centimet.	= 0.3527 ounces.
Gram	= 1	= 1 c. centimet.	= 15.432 grains.
Decigram	= .1	= 1 c. centimet.	= 1.5432 grains.
Centigram	= .01	= 10 c. millimet.	= 0.1543 grain.
Milligram	= .001	= 1 c. millimet.	= 0.0154 grain.

MEASURES OF LENGTH.

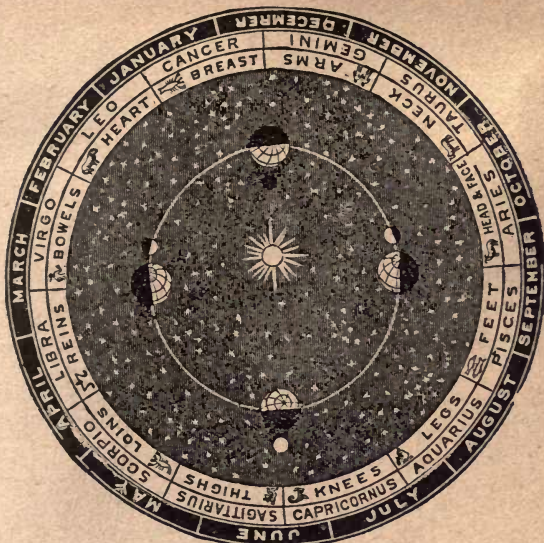
<i>Metric Denominations and Values.</i>		<i>Equivalents in Denominations in use.</i>	
Myriameter	= 10,000 meters	= 6.2137 miles.	
Kilometer	= 1,000 meters	= 0.62137 m. or 3,280 feet 10 inches.	
Hectometer	= 100 meters	= 328 feet and 1 inch.	
Dekameter	= 10 meters	= 39.37 inches.	
Meter	= 1 meter	= 39.37 inches.	
Decimeter	= .1 of a meter	= 3.937 inches.	
Centimeter	= .01 of a meter	= 0.3937 inch.	
Millimeter	= .001 of a meter	= 0.0394 inch.	

MEASURES OF SURFACE.

<i>Metric Denominations and Values.</i>		<i>Equivalents in Denominations in use.</i>	
Hectare	= 10,000 square meters	= 2.471 acres.	
Are	= 100 square meters	= 119.6 square yards.	
Centare	= 1 square meter	= 1,550 square inches.	

MEASURES OF CAPACITY.

<i>Metric Denominations and Values.</i>			<i>Equivalents in Denominations in use.</i>	
NAMES.	No. Liters.	Cubic Measure.	Dry Measure.	Wine Measure.
Kiloliter	= 1,000	= 1 cubic meter	= 1.308 cubic yards	= 264.17 galls.
Hectoliter	= 100	= .1 cubic meter	= 2 bush. 3.35 pks.	= 26.417 galls.
Decaliter	= 10	= 10 c. decimeters	= 9.08 quarts	= 2.6417 galls.
Liter	= 1	= 1 c. decimeter	= 0.908 quarts	= 1.0567 quarts.
Deciliter	= .1	= .1 c. decimeter	= 6.1022 cubic inch.	= 0.845 gills.
Centiliter	= .01	= 10 c. centimeters	= 0.6102 cubic inch.	= 0.338 fluid oz.
Milliliter	= .001	= 1 c. centimeter	= 0.061 cubic inch.	= 0.27 fluid dr.



HOW TO FIND THE DAY OF THE WEEK FOR ANY DATE.

RULE.—Take the last two figures of the given year and add one-fourth of itself to it; add also to this the day of the month and the ratio of the month and divide the sum by 7, and the remainder will be the day of the week, 1 denoting Sunday, 2 Monday, 3 Tuesday, and so on, and when there is no remainder it is Saturday.

Ratio: For Feb., March and Nov. is 6; for Sept. and Dec. 1; for April and July 2; for May 4; for Jan. and Oct. 3; for Aug. 5, and for June 0.

Example: On what day of the week was John born if the date was Sept. 16, 1841?

Last 2 figures 41 of the year.

Solution: $41 \div 4 = 10$

Day of the month 16

Ratio 1

Total 68

$68 \div 7 = 9$ with 5 remainder.

Hence John was born on the 5th day of the week or Thursday.

N. B. The above rule is for the present century, for the last century add 2 before dividing by 7, and for the next century subtract 2 before dividing by 7.



“THE LABORER IS WORTHY OF HIS HIRE.”

HOW TO USE THE WAGE TABLE.

EXAMPLE :

Find the amount due for 7 months, 19 days, at \$19 a month.

For 7 months,	-	-	-	\$133.
For 19 days,	-	-	-	13.88
Total amount,	-	-	-	<u>\$146.88</u>

Find the amount due for 1 year, 8 months and 3 days, at \$26 per month.

For 1 year, @ \$20 per month,	-	-	\$240.	
“ 1 “ @ 6 (½ of \$12) per month,			72.	
“ 8 months, @ \$20 per month,	-	-	160.	
“ 8 “ @ 6 (½ of \$12) per month			48.	
“ 3 days, @ \$20 per month,	-	-	2.31	
“ 3 “ @ 6 (½ of \$12) per month,			.69	
Total amount,	-	-	-	<u>\$523.00</u>

To get the wages for \$2.00 take it for \$ 1.00 and multiply by 2.

“ “ “ “ “ 4.00 “ “ 12.00 and divide by 3.	
“ “ “ “ “ 5.00 “ “ 10.00 “ “ “ 2.	
“ “ “ “ “ 6.00 “ “ 12.00 “ “ “ 2.	
“ “ “ “ “ 8.00 “ “ 16.00 “ “ “ 2.	
“ “ “ “ “ 9.00 “ “ 18.00 “ “ “ 2.	

MONTHLY WAGES TABLE.*

313

HOW TO CALCULATE THE WAGES OF HIRED HELP AT SIGHT.

DATE.	\$ 1	\$ 3	\$ 7	\$10	\$ 11	\$12	\$13	\$14	\$15	\$16	\$17	\$18	\$19	\$20
1	.04	.12	.27	.38	.42	.46	.50	.54	.58	.62	.65	.69	.73	.77
2	.08	.23	.54	.77	.85	.92	1.00	1.08	1.15	1.23	1.31	1.38	1.46	1.54
3	.12	.35	.81	1.15	1.27	1.38	1.50	1.62	1.73	1.85	1.96	2.08	2.19	2.31
4	.15	.46	1.08	1.54	1.69	1.85	2.00	2.15	2.31	2.46	2.62	2.77	2.92	3.08
5	.19	.58	1.25	1.92	2.12	2.31	2.50	2.69	2.88	3.08	3.27	3.46	3.65	3.85
6	.23	.69	1.62	2.31	2.54	2.77	3.00	3.23	3.46	3.69	3.92	4.15	4.38	4.62
7	.27	.81	1.88	2.69	2.96	3.23	3.50	3.77	4.04	4.31	4.58	4.85	5.12	5.38
8	.31	.92	2.15	3.08	3.38	3.69	4.00	4.31	4.62	4.92	5.23	5.54	5.85	6.15
9	.35	1.04	2.42	3.46	3.81	4.15	4.50	4.85	5.19	5.54	5.88	6.23	6.58	6.92
10	.38	1.15	2.69	3.85	4.23	4.62	5.00	5.38	5.77	6.15	6.54	6.92	7.31	7.69
11	.42	1.27	2.96	4.23	4.65	5.08	5.50	5.92	6.35	6.77	7.19	7.62	8.04	8.46
12	.46	1.38	3.23	4.62	5.08	5.44	6.00	6.46	6.92	7.38	7.85	8.31	8.77	9.23
13	.50	1.50	3.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00
14	.54	1.62	3.77	5.38	5.92	6.46	7.00	7.54	8.08	8.62	9.15	9.69	10.23	10.77
15	.58	1.73	4.04	5.77	6.35	6.92	7.50	8.08	8.65	9.23	9.81	10.38	10.96	11.54
16	.62	1.85	4.31	6.15	6.77	7.38	8.00	8.62	9.23	9.85	10.46	11.08	11.69	12.31
17	.65	1.96	4.58	6.54	7.19	7.85	8.50	9.15	9.81	10.46	11.12	11.77	12.42	13.08
18	.69	2.08	4.85	6.92	7.62	8.31	9.00	9.69	10.38	11.08	11.77	12.46	13.15	13.85
19	.73	2.19	5.12	7.31	8.04	8.77	9.50	10.23	10.96	11.69	12.42	13.15	13.88	14.62
20	.77	2.31	5.38	7.69	8.46	9.23	10.00	10.77	11.54	12.31	13.03	13.85	14.62	15.38
21	.81	2.42	5.65	8.08	8.85	9.69	10.50	11.31	12.12	12.92	13.73	14.54	15.35	16.15
22	.85	2.54	5.92	8.46	9.31	10.15	11.00	11.85	12.69	13.54	14.38	15.23	16.08	16.92
23	.88	2.65	6.19	8.85	9.73	10.62	11.50	12.38	13.27	14.15	15.04	15.92	16.81	17.69
24	.92	2.77	6.46	9.23	10.15	11.08	12.00	12.92	13.85	14.77	15.69	16.62	17.54	18.46
25	.96	2.88	6.73	9.62	10.58	11.54	12.50	13.46	14.42	15.38	16.35	17.31	18.27	19.23
1mo	1.00	3.00	7.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00
2	2.00	6.00	14.00	20.00	22.00	24.00	26.00	28.00	30.00	32.00	34.00	36.00	38.00	40.00
3	3.00	9.00	21.00	30.00	33.00	36.00	39.00	42.00	45.00	48.00	51.00	54.00	57.00	60.00
4	4.00	12.00	28.00	40.00	44.00	48.00	52.00	56.00	60.00	64.00	68.00	72.00	70.00	80.00
5	5.00	15.00	35.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00	100.00
6	6.00	18.00	42.00	60.00	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00
7	7.00	21.00	49.00	70.00	77.00	84.00	91.00	98.00	105.00	112.00	119.00	126.00	133.00	140.00
8	8.00	24.00	56.00	80.00	88.00	96.00	104.00	112.00	120.00	128.00	136.00	144.00	152.00	160.00
9	9.00	27.00	63.00	90.00	99.00	108.00	117.00	126.00	135.00	144.00	153.00	162.00	171.00	180.00
10	10.00	30.00	70.00	100.00	110.00	120.00	130.00	140.40	150.00	160.00	170.00	180.00	190.00	200.00
11	11.00	33.00	77.00	110.00	121.00	132.00	143.00	154.00	165.00	176.00	187.00	198.00	209.00	220.00
1 yr	12.00	36.00	84.00	120.00	132.00	144.00	156.00	168.00	180.00	192.00	204.00	216.00	228.00	240.00

* 26 working days in a month.

MONTHLY WAGES TABLE—Continued.

DATE.	\$21	\$22	\$23	\$24	\$25	\$26	\$27	\$28	\$29	\$30
1	.80	.85	.89	.92	.96	1.00	1.04	1.07	1.12	1.15
2	1.60	1.70	1.77	1.85	1.92	2.00	2.08	2.15	2.25	2.30
3	2.40	2.55	2.65	2.77	2.88	3.00	3.10	3.24	3.35	3.45
4	3.20	3.38	3.54	3.70	3.85	4.00	4.15	4.29	4.47	4.62
5	4.00	4.23	4.43	4.62	4.80	5.00	5.20	5.35	5.60	5.77
6	4.80	5.10	5.30	5.55	5.75	6.00	6.24	6.42	6.72	6.80
7	5.60	5.95	6.20	6.45	6.70	7.00	7.27	7.50	7.84	7.95
8	6.40	6.75	7.08	7.38	7.68	8.00	8.30	8.57	8.96	9.10
9	7.20	7.60	7.95	8.30	8.64	9.00	9.35	9.63	10.08	10.25
10	8.00	8.45	8.85	9.23	9.60	10.00	10.40	10.70	11.20	11.45
11	8.80	9.30	9.73	10.15	10.56	11.00	11.44	11.80	12.32	12.60
12	9.60	10.15	10.62	11.08	11.52	12.00	12.48	12.90	13.45	13.80
13	10.40	11.00	11.50	12.00	12.50	13.00	13.50	14.00	14.57	15.00
14	11.20	11.85	12.40	12.92	13.46	14.00	14.55	15.05	15.70	16.15
15	12.00	12.70	13.30	13.75	14.42	15.00	15.60	16.12	16.82	17.30
16	12.80	13.50	14.18	14.67	15.48	16.00	16.64	17.20	17.95	18.45
17	13.60	14.35	15.05	15.60	16.45	17.00	17.68	18.25	19.07	19.60
18	14.40	15.20	15.95	16.52	17.40	18.00	18.72	19.32	20.20	20.80
19	15.20	16.00	16.80	17.45	18.35	19.00	19.75	20.40	21.32	21.95
20	16.00	16.85	17.70	18.37	19.30	20.00	20.80	21.47	22.45	23.10
21	16.80	17.75	18.60	19.30	20.26	21.00	21.84	22.55	23.55	24.25
22	17.65	18.60	19.50	20.22	21.22	22.00	22.88	23.62	24.65	25.40
23	18.45	19.45	20.38	21.15	22.18	23.00	23.90	24.70	25.77	26.60
24	19.25	20.30	21.25	22.07	23.15	24.00	24.96	25.80	26.90	27.75
25	20.10	21.15	22.10	23.10	24.10	25.00	25.98	26.95	27.95	28.85
1 mo.	21.00	22.00	23.00	24.00	25.00	26.00	27.00	28.00	29.00	30.00
2	42.00	44.00	46.00	48.00	50.00	52.00	54.00	56.00	58.00	60.00
3	63.00	66.00	69.00	72.00	75.00	78.00	81.00	84.00	87.00	90.00
4	84.00	88.00	92.00	96.00	100.00	104.00	108.00	112.00	116.00	120.00
5	105.00	110.00	115.00	120.00	125.00	130.00	135.00	140.00	145.00	150.00
6	126.00	132.00	138.00	144.00	150.00	156.00	162.00	168.00	174.00	180.00
7	147.00	154.00	161.00	168.00	175.00	182.00	189.00	196.00	203.00	210.00
8	168.00	176.00	184.00	192.00	200.00	208.00	216.00	224.00	232.00	240.00
9	189.00	198.00	207.00	216.00	225.00	234.00	243.00	252.00	261.00	270.00
10	210.00	220.00	230.00	240.00	250.00	260.00	270.00	280.00	290.00	300.00
11	231.00	242.00	253.00	264.00	275.00	286.00	297.00	308.00	319.00	330.00
1 yr.	252.00	264.00	276.00	288.00	300.00	312.00	324.00	336.00	348.00	360.00

MONTHLY WAGES TABLE—Continued.

315

DATE.	\$31	\$32	\$33	\$34	\$35	\$36	\$37	\$38	\$39	\$40
1	1.20	1.23	1.27	1.30	1.35	1.38	1.42	1.46	1.50	1.50
2	2.40	2.46	2.54	2.60	2.70	2.77	2.80	2.90	3.00	3.08
3	3.57	3.70	3.81	3.90	4.05	4.15	4.25	4.36	4.50	4.62
4	4.76	4.93	5.07	5.20	5.40	5.53	5.70	5.82	6.00	6.16
5	6.00	6.16	6.35	6.50	6.70	6.90	7.12	7.28	7.50	7.70
6	7.19	7.40	7.60	7.80	8.05	8.28	8.55	8.75	9.00	9.24
7	8.38	8.63	8.87	9.10	9.40	9.65	9.97	10.20	10.50	10.75
8	9.58	9.85	10.14	10.40	10.75	11.05	11.40	11.65	12.00	12.32
9	10.77	11.08	11.40	11.70	12.05	12.50	12.83	13.10	13.50	13.85
10	11.96	12.30	12.67	13.00	13.40	13.88	14.25	14.55	15.00	15.35
11	13.15	13.50	13.93	14.30	14.75	15.26	15.65	16.00	16.50	16.90
12	14.35	14.75	15.20	15.65	16.15	16.65	17.10	17.55	18.00	18.45
13	15.50	16.00	16.50	17.00	17.50	18.00	18.50	19.00	19.50	20.00
14	16.70	17.23	17.76	18.30	18.85	19.40	19.92	20.46	21.00	21.54
15	17.90	18.47	19.00	19.60	20.20	20.78	21.35	21.92	22.50	23.05
16	19.10	19.70	20.27	20.90	21.55	22.15	22.77	23.38	24.00	24.60
17	20.30	20.93	21.54	22.20	22.90	23.53	24.20	24.85	25.50	26.13
18	21.50	22.15	22.80	23.50	24.25	24.90	25.60	26.30	27.00	27.65
19	22.70	23.38	24.05	24.80	25.60	26.30	27.02	27.75	28.50	29.20
20	23.90	24.60	25.32	26.15	26.95	27.70	28.65	29.20	30.00	30.75
21	25.10	25.83	26.60	27.40	28.30	29.08	30.16	30.75	31.50	32.25
22	26.30	27.05	27.87	28.70	29.65	30.45	31.55	32.21	33.00	33.80
23	27.50	28.28	29.14	30.00	31.00	31.83	32.97	33.67	34.50	35.35
24	28.70	29.50	30.41	31.35	32.35	33.20	34.40	35.13	36.00	36.90
25	29.90	30.75	31.70	32.65	33.70	34.60	35.55	36.36	37.50	38.45
1 mo.	31.00	32.00	33.00	34.00	35.00	36.00	37.00	38.00	39.00	40.00
2	62.00	64.00	66.00	68.00	70.00	72.00	74.00	76.00	78.00	80.00
3	93.00	96.00	99.00	102.00	105.00	108.00	111.00	114.00	117.00	120.00
4	124.00	128.00	132.00	136.00	140.00	144.00	148.00	152.00	156.00	160.00
5	155.00	160.00	165.00	170.00	175.00	180.00	185.00	190.00	195.00	200.00
6	186.00	192.00	198.00	204.00	210.00	216.00	222.00	228.00	234.00	240.00
7	217.00	224.00	231.00	238.00	245.00	252.00	259.00	266.00	273.00	280.00
8	248.00	256.00	264.00	272.00	280.00	288.00	296.00	304.00	312.00	320.00
9	279.00	288.00	297.00	306.00	315.00	324.00	333.00	342.00	351.00	360.00
10	310.00	320.00	330.00	340.00	350.00	360.00	370.00	380.00	390.00	400.00
11	341.00	352.00	363.00	374.00	385.00	396.00	407.00	418.00	429.00	440.00
1 yr.	372.00	384.00	396.00	408.00	420.00	432.00	444.00	456.00	468.00	480.00

TABLE OF WAGES BY THE WEEK, GIVING THE DAY AND HOUR.

	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	\$14	\$15	\$16	\$17	\$18
$\frac{1}{2}$ hr.		$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{4}$	$\frac{4}{5}$	5	5	$6\frac{1}{2}$	$7\frac{1}{2}$	$8\frac{1}{2}$	$9\frac{1}{2}$	10	10	$11\frac{1}{2}$	$12\frac{1}{2}$	$13\frac{1}{2}$	$14\frac{1}{2}$	15
1 hr.	$\frac{1}{3}$	$\frac{3}{4}$	5	$6\frac{2}{3}$	$8\frac{1}{3}$	10	$11\frac{2}{3}$	$13\frac{1}{3}$	15	$16\frac{2}{3}$	$18\frac{1}{3}$	20	$21\frac{2}{3}$	$23\frac{1}{3}$	25	$26\frac{2}{3}$	$28\frac{1}{3}$	30
2 hrs.	$\frac{3}{4}$	$6\frac{2}{3}$	10	$13\frac{1}{3}$	$16\frac{2}{3}$	20	$23\frac{1}{3}$	$26\frac{2}{3}$	30	$33\frac{1}{3}$	$36\frac{2}{3}$	40	$43\frac{1}{3}$	$46\frac{2}{3}$	50	$53\frac{1}{3}$	$56\frac{2}{3}$	60
3 hrs.	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
4 hrs.	$6\frac{2}{3}$	$13\frac{1}{3}$	20	$26\frac{2}{3}$	$33\frac{1}{3}$	40	$46\frac{2}{3}$	$53\frac{1}{3}$	60	$66\frac{2}{3}$	$73\frac{1}{3}$	80	$86\frac{2}{3}$	$93\frac{1}{3}$	1.00	$1.06\frac{2}{3}$	$1.13\frac{1}{3}$	1.20
5 hrs.	$8\frac{1}{3}$	$16\frac{2}{3}$	25	$33\frac{1}{3}$	$41\frac{2}{3}$	50	$58\frac{1}{3}$	$66\frac{2}{3}$	75	$83\frac{1}{3}$	$91\frac{2}{3}$	1.00	$1.08\frac{1}{3}$	$1.16\frac{2}{3}$	1.25	$1.33\frac{1}{3}$	$1.41\frac{2}{3}$	1.50
6 hrs.	10	20	30	40	50	60	70	80	90	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80
7 hrs.	$11\frac{2}{3}$	$23\frac{1}{3}$	35	$46\frac{2}{3}$	$58\frac{1}{3}$	70	$81\frac{2}{3}$	$93\frac{1}{3}$	1.05	$1.16\frac{2}{3}$	$1.28\frac{1}{3}$	1.40	$1.51\frac{2}{3}$	$1.63\frac{1}{3}$	1.75	$1.86\frac{2}{3}$	$1.98\frac{1}{3}$	2.10
8 hrs.	$13\frac{1}{3}$	$26\frac{2}{3}$	40	$53\frac{1}{3}$	$66\frac{2}{3}$	80	$93\frac{1}{3}$	$1.06\frac{2}{3}$	1.20	$1.33\frac{1}{3}$	$1.46\frac{2}{3}$	1.60	$1.73\frac{1}{3}$	$1.86\frac{2}{3}$	2.00	$2.13\frac{1}{3}$	$2.26\frac{2}{3}$	2.40
9 hrs.	15	30	45	60	75	90	1.05	1.20	1.35	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70
1 day	$16\frac{2}{3}$	$33\frac{1}{3}$	50	$66\frac{2}{3}$	$83\frac{1}{3}$	1.00	$1.16\frac{2}{3}$	$1.33\frac{1}{3}$	1.50	$1.66\frac{2}{3}$	$1.83\frac{1}{3}$	2.00	$2.16\frac{2}{3}$	$2.33\frac{1}{3}$	2.50	$2.66\frac{2}{3}$	$2.83\frac{1}{3}$	3.00
2 ds.	$33\frac{1}{3}$	$66\frac{2}{3}$	1.00	$1.33\frac{1}{3}$	$1.66\frac{2}{3}$	2.00	$2.33\frac{1}{3}$	$2.66\frac{2}{3}$	3.00	$3.33\frac{1}{3}$	$3.66\frac{2}{3}$	4.00	$4.33\frac{1}{3}$	$4.66\frac{2}{3}$	5.00	$5.33\frac{1}{3}$	$5.66\frac{2}{3}$	6.00
3 ds.	50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
4 ds.	$66\frac{2}{3}$	$1.33\frac{1}{3}$	2.00	$2.66\frac{2}{3}$	$3.33\frac{1}{3}$	4.00	$4.66\frac{2}{3}$	$5.33\frac{1}{3}$	6.00	$6.66\frac{2}{3}$	$7.33\frac{1}{3}$	8.00	$8.66\frac{2}{3}$	$9.33\frac{1}{3}$	10.00	$10.66\frac{2}{3}$	$11.33\frac{1}{3}$	12.00
5 ds.	$83\frac{1}{3}$	$1.66\frac{2}{3}$	2.50	$3.33\frac{1}{3}$	$4.16\frac{2}{3}$	5.00	$5.83\frac{1}{3}$	$6.66\frac{2}{3}$	7.50	$8.33\frac{1}{3}$	$9.16\frac{2}{3}$	10.00	$10.83\frac{1}{3}$	$11.66\frac{2}{3}$	12.50	$13.33\frac{1}{3}$	$14.16\frac{2}{3}$	15.00
6 ds.	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00

The above table is based on 10 hours a day.

EXAMPLE: What will 4 days and 7 hours come to at \$9.00 per week? Ans.: \$7.05.

A READY RECKONER.

HOW TO FIND THE PRICE OF ANY NUMBER OF POUNDS, YARDS, PIECES
OR BUSHELS.

The first column gives the NUMBER, the top columns the PRICES.

NOS.	2 c.	3 c.	4 c.	5 c.	6 c.	7 c.	8 c.	9 c.	10 c.	11 c.	12 c.	12½ c.	13 c.	14 c.
2	.4	.6	.8	.10	.12	.14	.16	.18	.20	.22	.24	.25	.26	.28
3	.6	.9	.12	.15	.18	.21	.24	.27	.30	.33	.36	37½	.39	.42
4	.8	.12	.16	.20	.24	.28	.32	.36	.40	.44	.48	.50	.52	.56
5	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.62½	.65	.70
6	.12	.18	.24	.30	.36	.42	.48	.54	.60	.66	.72	.75	.78	.84
7	.14	.21	.28	.35	.42	.49	.56	.63	.70	.77	.84	.87½	.91	.98
8	.16	.24	.32	.40	.48	.56	.64	.72	.80	.88	.96	1.00	1.04	1.12
9	.18	.27	.36	.45	.54	.63	.72	.81	.90	.99	1.08	1.12½	1.17	1.26
10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.25	1.30	1.40
11	.22	.33	.44	.55	.66	.77	.88	.99	1.10	1.21	1.32	1.37½	1.43	1.54
12	.24	.36	.48	.60	.72	.84	.96	1.08	1.20	1.32	1.44	1.50	1.56	1.68
13	.26	.39	.52	.65	.78	.91	1.04	1.17	1.30	1.43	1.56	1.62½	1.69	1.82
14	.28	.42	.56	.70	.84	.98	1.12	1.26	1.40	1.54	1.68	1.75	1.82	1.96
15	.30	.45	.60	.75	.90	1.05	1.20	1.35	1.50	1.65	1.80	1.87½	1.95	2.10
16	.32	.48	.64	.80	.96	1.12	1.28	1.44	1.60	1.66	1.92	2.00	2.08	2.24
17	.34	.51	.68	.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04	2.12½	2.21	2.38
18	.36	.54	.72	.90	1.08	1.26	1.44	1.62	1.80	1.98	2.16	2.25	2.34	2.52
19	.38	.57	.76	.95	1.14	1.33	1.52	1.71	1.90	2.09	2.28	2.37½	2.47	2.66
20	.40	.60	.80	1.00	1.10	1.40	1.60	1.80	2.00	2.20	2.40	2.50	2.60	2.80
21	.42	.63	.84	1.05	1.26	1.47	1.68	1.89	2.10	2.31	2.52	2.62½	2.73	2.94
22	.44	.66	.88	1.10	1.32	1.54	1.76	1.98	2.20	2.42	2.64	2.75	2.86	3.08
23	.46	.69	.92	1.15	1.38	1.61	1.84	2.07	2.30	2.53	2.76	2.87½	2.99	3.22
24	.48	.72	.96	1.20	1.44	1.68	1.92	2.16	2.40	2.64	2.88	3.00	3.12	3.36
25	.50	.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.12½	3.25	3.50
26	.52	.78	1.04	1.30	1.56	1.82	2.08	2.34	2.60	2.86	3.12	3.25	3.38	3.64
27	.54	.81	1.08	1.35	1.62	1.89	2.16	2.43	2.70	2.97	3.24	3.37½	3.51	3.78
28	.56	.84	1.12	1.40	1.68	1.96	2.24	2.53	2.80	3.08	3.36	3.50	3.64	3.92
29	.58	.87	1.16	1.45	1.74	2.03	2.32	2.61	2.90	3.19	3.48	3.62½	3.77	4.06
30	.60	.90	1.20	1.50	1.80	2.10	2.40	2.70	3.00	3.30	3.60	3.75	3.90	4.20
31	.62	.93	1.24	1.55	1.86	2.17	2.48	2.79	3.10	3.41	3.72	3.87½	4.03	4.34
32	.64	.96	1.28	1.60	1.92	2.24	2.56	2.88	3.20	3.52	3.84	4.00	4.16	4.48
33	.66	.99	1.32	1.65	1.98	2.31	2.64	2.97	3.30	3.63	3.96	4.12½	4.29	4.62
34	.68	1.02	1.36	1.70	2.04	2.38	2.72	3.06	3.40	3.74	4.08	4.25	4.42	4.76
35	.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15	3.50	3.85	4.20	4.37½	4.55	4.90
36	.72	1.08	1.44	1.80	2.16	2.52	2.88	3.24	3.60	3.96	4.32	4.50	4.68	5.04
37	.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70	4.07	4.44	4.62½	4.81	5.18
38	.76	1.14	1.52	1.90	2.28	2.66	3.04	3.42	3.80	4.18	4.56	4.75	4.94	5.32
39	.78	1.17	1.56	1.95	2.34	2.73	3.12	3.51	3.90	4.29	4.68	4.87½	5.07	5.46
40	.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60	4.00	4.40	4.80	5.00	5.20	5.60
41	.82	1.23	1.64	2.05	2.46	2.87	3.28	3.69	4.10	4.51	4.92	5.12½	5.33	5.74
42	.84	1.26	1.68	2.10	2.52	2.94	3.36	3.78	4.20	4.62	5.04	5.25	5.46	5.88
43	.86	1.29	1.72	2.15	2.58	3.01	3.44	3.87	4.30	4.73	5.16	5.37½	5.59	6.02
44	.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96	4.40	4.84	5.28	5.50	5.72	6.16
45	.90	1.35	1.80	2.25	2.70	3.15	3.60	4.05	4.50	4.95	5.40	5.62½	5.85	6.30
46	.92	1.38	1.84	2.30	2.76	3.22	3.68	4.14	4.60	5.06	5.52	5.75	5.98	6.44
47	.94	1.41	1.88	2.35	2.82	3.29	3.76	4.23	4.70	5.17	5.64	5.87½	6.11	6.58
48	.96	1.44	1.92	2.40	2.88	3.36	3.84	4.32	4.80	5.28	5.76	6.00	6.24	6.72
49	.98	1.47	1.96	2.45	2.94	3.43	3.92	4.41	4.90	5.39	5.88	6.12½	6.37	6.86
50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.25	6.50	7.00
60	1.20	1.80	2.40	3.00	3.60	4.20	4.80	5.40	6.00	6.60	7.20	7.50	7.80	8.40
70	1.40	2.10	2.80	3.50	4.20	4.90	5.60	6.30	7.00	7.70	8.40	8.75	9.10	9.80
80	1.60	2.40	3.20	4.00	4.80	5.60	6.40	7.20	8.00	8.80	9.60	10.00	10.40	11.20
90	1.80	2.70	3.60	4.50	5.40	6.30	7.20	8.10	9.00	9.90	10.80	11.25	11.70	12.60
100	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	12.50	13.00	14.00

A READY RECKONER.

HOW TO FIND THE PRICE OF ANY NUMBER OF POUNDS, YARDS, PIECES
OR BUSHELS.

CONTINUED.

The first column gives the NUMBER, the top columns the PRICES.

NOS.	15 c.	16 c.	17 c.	18 c.	19 c.	20 c.	21 c.	22 c.	23 c.	24 c.	25 c.	26 c.	27 c.
2	.30	.32	.34	.36	.38	.40	.42	.44	.46	.48	.50	.52	.54
3	.45	.48	.51	.54	.57	.60	.63	.66	.69	.72	.75	.78	.81
4	.60	.64	.68	.72	.76	.80	.84	.88	.92	.96	1.00	1.04	1.08
5	.75	.80	.85	.90	.95	1.00	1.05	1.10	1.15	1.20	1.25	1.30	1.35
6	.90	.96	1.02	1.08	1.14	1.20	1.26	1.32	1.38	1.44	1.50	1.56	1.62
7	1.05	1.12	1.19	1.26	1.33	1.40	1.47	1.54	1.61	1.68	1.75	1.82	1.89
8	1.20	1.28	1.36	1.44	1.52	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16
9	1.35	1.44	1.53	1.62	1.71	1.80	1.89	1.98	2.07	2.16	2.25	2.34	2.43
10	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70
11	1.65	1.76	1.87	1.98	2.09	2.20	2.31	2.42	2.53	2.64	2.75	2.86	2.97
12	1.80	1.92	2.04	2.16	2.28	2.40	2.52	2.64	2.76	2.88	3.00	3.12	3.24
13	1.95	2.08	2.21	2.34	2.47	2.60	2.73	2.86	2.99	3.12	3.25	3.38	3.51
14	2.10	2.24	2.38	2.52	2.66	2.80	2.94	3.08	3.22	3.36	3.50	3.64	3.78
15	2.25	2.40	2.55	2.70	2.85	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05
16	2.40	2.56	2.72	2.88	3.04	3.20	3.36	3.52	3.68	3.84	4.00	4.16	4.32
17	2.55	2.72	2.89	3.06	3.23	3.40	3.57	3.74	3.91	4.08	4.25	4.42	4.59
18	2.70	2.88	3.06	3.24	3.42	3.60	3.78	3.96	4.14	4.32	4.50	4.68	4.86
19	2.85	3.04	3.23	3.42	3.61	3.80	3.99	4.18	4.37	4.56	4.75	4.94	5.13
20	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40
21	3.15	3.36	3.57	3.78	3.99	4.20	4.41	4.62	4.83	5.04	5.25	5.46	5.67
22	3.30	3.52	3.74	3.96	4.18	4.40	4.62	4.84	5.06	5.28	5.50	5.72	5.94
23	3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75	5.98	6.21
24	3.60	3.84	4.08	4.32	4.56	4.80	5.04	5.28	5.52	5.76	6.00	6.24	6.48
25	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75
26	3.90	4.16	4.42	4.68	4.94	5.20	5.46	5.72	5.98	6.24	6.50	6.75	7.02
27	4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75	7.02	7.29
28	4.20	4.48	4.76	5.04	5.32	5.60	5.88	6.16	6.44	6.72	7.00	7.28	7.56
29	4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25	7.54	7.83
30	4.50	4.80	5.10	5.40	5.70	6.00	6.30	6.60	6.90	7.20	7.50	7.80	8.10
31	4.65	4.96	5.27	5.58	5.89	6.20	6.51	6.82	7.13	7.44	7.75	8.06	8.37
32	4.80	5.12	5.44	5.76	6.08	6.40	6.72	7.04	7.36	7.68	8.00	8.32	8.64
33	4.95	5.28	5.61	5.94	6.27	6.60	6.93	7.26	7.59	7.92	8.25	8.58	8.91
34	5.10	5.44	5.78	6.12	6.46	6.80	7.14	7.48	7.82	8.16	8.50	8.84	9.18
35	5.25	5.60	5.95	6.30	6.65	7.00	7.35	7.70	8.05	8.40	8.75	9.10	9.45
36	5.40	5.76	6.12	6.48	6.84	7.20	7.56	7.92	8.28	8.64	9.00	9.36	9.72
37	5.55	5.92	6.29	6.66	7.03	7.40	7.77	8.14	8.51	8.88	9.25	9.62	9.99
38	5.70	6.08	6.46	6.84	7.22	7.60	7.98	8.36	8.74	9.12	9.50	9.88	10.26
39	5.85	6.24	6.63	7.02	7.41	7.80	8.19	8.58	8.97	9.36	9.75	10.14	10.53
40	6.00	6.40	6.80	7.20	7.60	8.00	8.40	8.80	9.20	9.60	10.00	10.40	10.80
41	6.15	6.56	6.97	7.38	7.79	8.20	8.61	9.02	9.43	9.84	10.25	10.66	11.07
42	6.30	6.72	7.14	7.56	7.98	8.40	8.82	9.24	9.66	10.08	10.50	10.92	11.34
43	6.45	6.88	7.31	7.74	8.17	8.60	9.03	9.46	9.89	10.32	10.75	11.18	11.61
44	6.60	7.04	7.48	7.92	8.36	8.80	9.24	9.68	10.12	10.56	11.00	11.44	11.88
45	6.75	7.20	7.65	8.10	8.55	9.00	9.45	9.90	10.35	10.80	11.25	11.70	12.15
46	6.90	7.36	7.82	8.28	8.74	9.20	9.66	10.12	10.58	11.04	11.50	11.96	12.42
47	7.05	7.52	7.99	8.46	8.93	9.40	9.87	10.34	10.81	11.28	11.75	12.22	12.69
48	7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00	12.48	12.96
49	7.35	7.84	8.33	8.82	9.31	9.80	10.29	10.78	11.27	11.76	12.25	12.74	13.23
50	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00	13.50
60	9.00	9.60	10.20	10.80	11.40	12.00	12.60	13.20	13.80	14.40	15.00	15.60	16.20
70	10.50	11.20	11.90	12.60	13.30	14.00	14.70	15.40	16.10	16.80	17.50	18.20	18.90
80	12.00	12.80	13.60	14.40	15.20	16.00	16.80	17.60	18.40	19.20	20.00	20.80	21.60
90	13.50	14.40	15.30	16.20	17.10	18.00	18.90	19.80	20.70	21.60	22.50	23.40	24.30
100	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00	26.00	2.700

A READY RECKONER.

HOW TO FIND THE PRICE OF ANY NUMBER OF POUNDS, YARDS, PIECES
OR BUSHELS.

CONTINUED.

The first column gives the NUMBER, the top columns the PRICES.

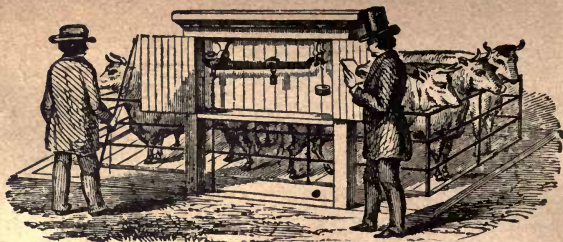
WOS.	28 c.	29 c.	30 c.	31 c.	32 c.	33 c.	34 c.	35 c.	36 c.	37 c.	38 c.	39 c.	40 c.
2	.56	.58	.60	.62	.64	.66	.68	.70	.72	.74	.76	.78	.80
3	.84	.87	.90	.93	.96	.99	1.02	1.05	1.08	1.11	1.14	1.17	1.20
4	1.12	1.16	1.20	1.24	1.28	1.32	1.36	1.40	1.44	1.48	1.52	1.56	1.60
5	1.40	1.45	1.50	1.56	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00
6	1.68	1.74	1.80	1.86	1.92	1.98	2.04	2.10	2.16	2.22	2.28	2.34	2.40
7	1.96	2.03	2.10	2.17	2.24	2.31	2.38	2.45	2.52	2.59	2.66	2.73	2.80
8	2.24	2.32	2.40	2.48	2.56	2.64	2.72	2.80	2.88	2.96	3.04	3.12	3.20
9	2.52	2.61	2.70	2.79	2.88	2.97	3.06	3.15	3.24	3.33	3.42	3.51	3.60
10	2.80	2.90	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	4.00
11	3.08	3.19	3.30	3.41	3.52	3.63	3.74	3.85	3.96	4.07	4.18	4.29	4.40
12	3.36	3.48	3.60	3.72	3.84	3.96	4.08	4.20	4.32	4.44	4.56	4.68	4.80
13	3.64	3.77	3.90	4.03	4.16	4.29	4.42	4.55	4.68	4.81	4.94	5.07	5.20
14	3.92	4.06	4.20	4.34	4.48	4.62	4.76	4.90	5.04	5.18	5.32	5.46	5.60
15	4.20	4.35	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	6.00
16	4.48	4.64	4.80	4.96	5.12	5.28	5.44	5.60	5.76	5.92	6.08	6.24	6.40
17	4.76	4.93	5.10	5.27	5.44	5.61	5.78	5.95	6.12	6.29	6.46	6.63	6.80
18	5.04	5.22	5.40	5.58	5.76	5.94	6.12	6.30	6.48	6.66	6.84	7.02	7.20
19	5.32	5.51	5.70	5.89	6.08	6.27	6.46	6.65	6.84	7.03	7.22	7.41	7.60
20	5.60	5.80	6.00	6.20	6.40	6.60	6.80	7.00	7.20	7.40	7.60	7.80	8.00
21	5.88	6.09	6.30	6.51	6.72	6.93	7.14	7.35	7.56	7.77	7.98	8.19	8.40
22	6.16	6.38	6.60	6.82	7.04	7.26	7.48	7.70	7.92	8.14	8.36	8.58	8.80
23	6.44	6.67	6.90	7.13	7.36	7.59	7.82	8.05	8.28	8.51	8.74	8.97	9.20
24	6.72	6.96	7.20	7.44	7.68	7.92	8.16	8.40	8.64	8.88	9.12	9.36	9.60
25	7.00	7.25	7.50	7.72	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75	10.00
26	7.28	7.54	7.80	8.06	8.32	8.58	8.84	9.10	9.36	9.62	9.88	10.14	10.40
27	7.56	7.83	8.10	8.37	8.64	8.91	9.18	9.45	9.72	9.99	10.26	10.53	10.80
28	7.84	8.12	8.40	8.68	8.96	9.24	9.52	9.80	10.08	10.36	10.64	10.92	11.20
29	8.12	8.41	8.70	8.99	9.28	9.57	9.86	10.15	10.44	10.73	11.02	11.31	11.60
30	8.40	8.70	9.00	9.30	9.60	9.90	10.20	10.50	10.80	11.10	11.40	11.70	12.00
31	8.68	8.99	9.30	9.61	9.92	10.23	10.54	10.85	11.16	11.47	11.78	12.09	12.40
32	8.96	9.28	9.60	9.92	10.24	10.56	10.88	11.20	11.52	11.84	12.16	12.48	12.80
33	9.24	9.57	9.90	10.23	10.56	10.89	11.22	11.55	11.88	12.21	12.54	12.87	13.20
34	9.52	9.86	10.20	10.54	10.88	11.22	11.56	11.90	12.24	12.58	12.92	13.26	13.60
35	9.80	10.15	10.50	10.85	11.20	11.55	11.90	12.25	12.60	12.95	13.30	13.65	14.00
36	10.08	10.44	10.80	11.16	11.52	11.88	12.24	12.60	12.96	13.32	13.68	14.04	14.40
37	10.36	10.73	11.10	11.47	11.84	12.21	12.58	12.95	13.32	13.69	14.06	14.43	14.80
38	10.64	11.02	11.40	11.78	12.16	12.54	12.92	13.30	13.68	14.06	14.44	14.82	15.20
39	10.92	11.31	11.70	12.09	12.48	12.87	13.26	13.65	14.04	14.43	14.82	15.21	15.60
40	11.20	11.66	12.00	12.40	12.80	13.20	13.60	14.00	14.40	14.80	15.20	15.60	16.00
41	11.48	11.89	12.30	12.71	13.12	13.53	13.94	14.35	14.76	15.17	15.58	15.99	16.40
42	11.76	12.18	12.60	13.02	13.44	13.86	14.28	14.70	15.12	15.54	15.96	16.38	16.80
43	12.04	12.47	12.90	13.33	13.76	14.19	14.62	15.05	15.48	15.91	16.34	16.77	17.20
44	12.32	12.76	13.20	13.61	14.08	14.52	14.96	15.40	15.84	16.28	16.72	17.16	17.60
45	12.60	13.05	13.50	13.95	14.40	14.85	15.30	15.75	16.20	16.65	17.10	17.55	18.00
46	12.88	13.34	13.80	14.26	14.72	15.18	15.64	16.10	16.56	17.02	17.48	17.94	18.40
47	13.16	13.63	14.10	14.57	15.04	15.51	15.98	16.45	16.92	17.39	17.86	18.33	18.80
48	13.44	13.92	14.40	14.88	15.36	15.84	16.32	16.80	17.28	17.76	18.24	18.72	19.20
49	13.72	14.21	14.70	15.19	15.68	16.17	16.66	17.15	17.64	18.13	18.62	19.11	19.60
50	14.00	14.50	15.00	15.50	16.00	16.50	17.00	17.50	18.00	18.50	19.00	19.50	20.00
60	16.80	17.40	18.00	18.60	19.20	19.80	20.40	21.00	21.60	22.20	22.80	23.40	24.00
70	19.60	20.30	21.00	21.70	22.40	23.10	23.80	24.50	25.20	25.90	26.60	27.30	28.00
80	22.40	23.20	24.00	24.80	25.60	26.40	27.20	28.00	28.80	29.60	30.40	31.20	32.00
90	25.20	26.10	27.00	27.90	28.80	29.70	30.60	31.50	32.40	33.30	34.20	35.10	36.00
100	28.00	29.00	30.00	31.00	32.00	33.00	34.00	35.00	36.00	37.00	38.00	39.00	40.00

READY RECKONER—Continued.

Nos.	41c.	42c.	43c.	44c.	45c.	46c.	47c.	48c.	49c.	50c.	55c.	60c.	65c.
2	.82	.84	.86	.88	.90	.92	.94	.96	.98	1.00	1.10	1.20	1.30
3	1.23	1.26	1.29	1.32	1.35	1.38	1.41	1.44	1.47	1.50	1.65	1.80	1.95
4	1.64	1.68	1.72	1.76	1.80	1.84	1.88	1.92	1.96	2.00	2.20	2.40	2.60
5	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.75	3.00	3.25
6	2.46	2.52	2.58	2.64	2.70	2.76	2.82	2.88	2.94	3.00	3.30	3.60	3.90
7	2.87	2.94	3.01	3.08	3.15	3.22	3.29	3.36	3.43	3.50	3.85	4.20	4.55
8	3.28	3.36	3.44	3.52	3.61	3.68	3.76	3.84	3.92	4.00	4.40	4.80	5.20
9	3.69	3.78	3.87	3.96	4.05	4.14	4.22	4.22	4.41	4.50	4.95	5.40	5.85
10	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	5.00	5.50	6.00	6.50
11	4.51	4.62	4.73	4.84	4.95	5.06	5.17	5.28	5.39	5.50	6.05	6.60	7.15
12	4.92	5.04	5.16	5.28	5.40	5.52	5.64	5.76	5.88	6.00	6.60	7.20	7.80
13	5.33	5.46	5.59	5.72	5.85	5.98	6.11	6.24	6.37	6.50	7.15	7.80	8.45
14	5.74	5.88	6.02	6.16	6.30	6.44	6.58	6.72	6.86	7.00	7.70	8.40	9.10
15	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	7.50	8.25	9.00	9.75
16	6.56	6.72	6.88	7.04	7.20	7.36	7.52	7.68	7.84	8.00	8.80	9.60	10.40
17	6.97	7.14	7.31	7.48	7.65	7.82	7.99	8.16	8.33	8.50	9.35	10.20	11.05
18	7.38	7.56	7.74	7.92	8.10	8.28	8.46	8.64	8.82	9.00	9.90	10.80	11.70
19	7.79	7.98	8.17	8.36	8.55	8.74	8.93	9.12	9.31	9.50	10.45	11.40	12.35
20	8.20	8.40	8.60	8.80	9.00	9.20	9.40	9.60	9.80	10.00	11.00	12.00	13.00
21	8.61	8.82	9.03	9.24	9.45	9.66	9.87	10.08	10.29	10.50	11.55	12.60	13.65
22	9.02	9.24	9.46	9.68	9.90	10.12	10.34	10.56	10.78	11.00	12.10	13.20	14.30
23	9.43	9.66	9.89	10.12	10.35	10.58	10.81	11.04	11.27	11.50	12.65	13.80	14.95
24	9.84	10.08	10.32	10.56	10.80	11.04	11.28	11.52	11.75	12.00	13.20	14.40	15.60
25	10.25	10.50	10.75	11.00	11.25	11.50	11.75	12.00	12.25	12.50	13.75	15.00	16.25
26	10.66	10.92	11.18	11.44	11.70	11.96	12.22	12.48	12.74	13.00	14.30	15.60	16.90
27	11.07	11.34	11.61	11.88	12.15	12.42	12.69	12.96	13.23	13.50	14.85	16.20	17.55
28	11.48	11.76	12.04	12.32	12.60	12.88	13.16	13.44	13.72	14.00	15.40	16.80	18.20
29	11.89	12.18	12.47	12.76	13.05	13.34	13.63	13.92	14.21	14.50	15.95	17.40	18.85
30	12.30	12.60	12.90	13.20	13.50	13.80	14.10	14.40	14.70	15.00	16.50	18.00	19.50
31	12.71	13.02	13.33	13.64	13.95	14.26	14.57	14.88	15.19	15.50	17.05	18.60	20.15
32	13.12	13.44	13.76	14.08	14.40	14.72	15.04	15.36	15.68	16.00	17.60	19.20	20.80
33	13.53	13.86	14.19	14.52	14.85	15.18	15.51	15.84	16.17	16.50	18.15	19.80	21.45
34	13.94	14.28	14.62	14.96	15.30	15.64	15.98	16.32	16.66	17.00	18.70	20.40	22.10
35	14.35	14.70	15.05	15.40	15.75	16.10	16.45	16.80	17.15	17.50	19.25	21.00	22.75
36	14.76	15.12	15.48	15.84	16.20	16.56	16.92	17.28	17.64	18.00	19.80	21.60	23.40
37	15.17	15.54	15.91	16.28	16.65	17.02	17.39	17.76	18.13	18.50	20.35	22.20	24.05
38	15.58	15.96	16.34	16.72	17.10	17.48	17.86	18.24	18.62	19.00	20.90	22.80	24.70
39	15.99	16.38	16.77	17.16	17.55	17.94	18.33	18.72	19.11	19.50	21.45	23.40	25.35
40	16.40	16.80	17.20	17.60	18.00	18.40	18.80	19.20	19.60	20.00	22.00	24.00	26.00
41	16.81	17.22	17.63	18.04	18.45	18.86	19.27	19.68	20.09	20.50	22.55	24.60	26.65
42	17.22	17.64	18.06	18.48	18.90	19.32	19.74	20.16	20.58	21.00	23.10	25.20	27.30
43	17.63	18.06	18.49	18.92	19.35	19.78	20.21	20.64	21.07	21.50	23.65	25.80	27.95
44	18.04	18.48	18.92	19.36	19.80	20.24	20.68	21.12	21.56	22.00	24.20	26.40	28.66
45	18.45	18.90	19.35	19.80	20.25	20.70	21.15	21.60	22.05	22.50	24.75	27.00	29.25
46	18.86	19.32	19.78	20.24	20.70	21.16	21.62	22.08	22.54	23.00	25.30	27.60	29.90
47	19.27	19.74	20.21	20.68	21.15	21.62	22.09	22.56	23.03	23.50	25.85	28.20	30.55
48	19.68	20.16	20.64	21.12	21.60	22.08	22.56	23.04	23.52	24.00	26.40	28.80	31.20
49	20.09	20.58	21.07	21.56	22.05	22.54	23.03	23.52	24.01	24.50	26.95	29.40	31.85
50	20.50	21.00	21.50	22.00	22.50	23.00	23.50	24.00	24.50	25.00	27.50	30.00	32.50
60	24.60	25.20	25.80	26.40	27.00	27.60	28.20	28.80	29.40	30.00	33.00	36.00	39.00
70	28.70	29.40	30.10	30.80	31.50	32.20	32.90	33.60	34.30	35.00	38.50	42.00	45.50
80	32.80	33.60	34.40	35.20	36.00	36.80	37.60	38.40	39.20	40.00	44.00	48.00	52.00
90	36.90	37.80	38.70	39.60	40.50	41.40	42.30	43.20	44.10	45.00	49.50	54.00	58.50
100	41.00	42.00	43.00	44.00	45.00	46.00	47.00	48.00	49.00	50.00	55.00	60.00	65.00

READY RECKONER—Continued.

Nos.	70c.	75c.	80c.	85c.	90c.	95c.	1.00	1.50	2.00	3.00	4.00	5.00	10.00
2	1.40	1.50	1.60	1.70	1.80	1.90	2.00	3.00	4.00	6.00	8.00	10.00	20.00
3	2.10	2.25	2.40	2.55	2.70	2.85	3.00	4.50	6.00	9.00	12.00	15.00	30.00
4	2.80	3.00	3.20	3.40	3.60	3.80	4.00	6.00	8.00	12.00	16.00	20.00	40.00
5	3.50	3.75	4.00	4.25	4.50	4.75	5.00	7.50	10.00	15.00	20.00	25.00	50.00
6	4.20	4.50	4.80	5.10	5.40	5.70	6.00	9.00	12.00	18.00	24.00	30.00	60.00
7	4.90	5.25	5.60	5.95	6.30	6.65	7.00	10.50	14.00	21.00	28.00	35.00	70.00
8	5.60	6.00	6.40	6.80	7.20	7.60	8.00	12.00	16.00	24.00	32.00	40.00	80.00
9	6.30	6.75	7.20	7.65	8.10	8.55	9.00	13.50	18.00	27.00	36.00	45.00	90.00
10	7.00	7.50	8.00	8.50	9.00	9.50	10.00	15.00	20.00	30.00	40.00	50.00	100.00
11	7.70	8.25	8.80	9.35	9.90	10.45	11.00	16.50	22.00	33.00	44.00	55.00	110.00
12	8.40	9.00	9.60	10.20	10.80	11.40	12.00	18.00	24.00	36.00	48.00	60.00	120.00
13	9.10	9.75	10.40	11.05	11.70	12.35	13.00	19.50	26.00	39.00	52.00	65.00	130.00
14	9.80	10.50	11.20	11.90	12.60	13.30	14.00	21.00	28.00	42.00	56.00	70.00	140.00
15	10.50	11.25	12.00	12.75	13.50	14.25	15.00	22.50	30.00	45.00	60.00	75.00	150.00
16	11.20	12.00	12.80	13.60	14.40	15.20	16.00	24.00	32.00	48.00	64.00	80.00	160.00
17	11.90	12.75	13.60	14.45	15.30	16.15	17.00	25.50	34.00	51.00	68.00	85.00	170.00
18	12.60	13.50	14.40	15.30	16.20	17.10	18.00	27.00	36.00	54.00	72.00	90.00	180.00
19	13.30	14.25	15.20	16.15	17.10	18.05	19.00	28.50	38.00	57.00	76.00	95.00	190.00
20	14.00	15.00	16.00	17.00	18.00	19.00	20.00	30.00	40.00	60.00	80.00	100.00	200.00
21	14.70	15.75	16.80	17.85	18.90	19.95	21.00	31.50	42.00	63.00	84.00	105.00	210.00
22	15.40	16.50	17.60	18.70	19.80	20.90	22.00	33.00	44.00	66.00	88.00	110.00	220.00
23	16.10	17.25	18.40	19.55	20.70	21.85	23.00	34.50	46.00	69.00	92.00	115.00	230.00
24	16.80	18.00	19.20	20.40	21.60	22.80	24.00	36.00	48.00	72.00	96.00	120.00	240.00
25	17.50	18.75	20.00	21.25	22.50	23.75	25.00	37.50	50.00	75.00	100.00	125.00	250.00
26	18.20	19.50	20.80	22.10	23.40	24.70	26.00	39.00	52.00	78.00	104.00	130.00	260.00
27	18.90	20.25	21.60	22.95	24.30	25.65	27.00	40.50	54.00	81.00	108.00	135.00	270.00
28	19.60	21.00	22.40	23.80	25.20	26.60	28.00	42.00	56.00	84.00	112.00	140.00	280.00
29	20.30	21.75	23.20	24.65	26.10	27.55	29.00	43.50	58.00	87.00	116.00	145.00	290.00
30	21.00	22.50	24.00	25.50	27.00	28.50	30.00	45.00	60.00	90.00	120.00	150.00	300.00
31	21.70	23.25	24.80	26.35	27.90	29.45	31.00	46.50	62.00	93.00	124.00	155.00	310.00
32	22.40	24.00	25.60	27.20	28.80	30.40	32.00	48.00	64.00	96.00	128.00	160.00	320.00
33	23.10	24.75	26.40	28.05	29.70	31.35	33.00	49.50	66.00	99.00	132.00	165.00	330.00
34	23.80	25.50	27.20	28.90	30.60	32.30	34.00	51.00	68.00	102.00	136.00	170.00	340.00
35	24.50	26.25	28.00	29.75	31.50	33.25	35.00	52.50	70.00	105.00	140.00	175.00	350.00
36	25.20	27.00	28.80	30.60	32.40	34.20	36.00	54.00	72.00	108.00	144.00	180.00	360.00
37	25.90	27.75	29.60	31.45	33.30	35.15	37.00	55.50	74.00	111.00	148.00	185.00	370.00
38	26.60	28.50	30.40	32.30	34.20	36.10	38.00	57.00	76.00	114.00	152.00	190.00	380.00
39	27.30	29.25	31.20	33.15	35.10	37.05	39.00	58.50	78.00	117.00	156.00	195.00	390.00
40	28.00	30.00	32.00	34.00	36.00	38.00	40.00	60.00	80.00	120.00	160.00	200.00	400.00
41	28.70	30.75	32.80	34.85	36.90	38.95	41.00	61.50	82.00	123.00	164.00	205.00	410.00
42	29.40	31.50	33.60	35.70	37.80	39.90	42.00	63.00	84.00	126.00	168.00	210.00	420.00
43	30.10	32.25	34.40	36.55	38.70	40.85	43.00	64.50	86.00	129.00	172.00	215.00	430.00
44	30.80	33.00	35.20	37.40	39.60	41.80	44.00	66.00	88.00	132.00	176.00	220.00	440.00
45	31.50	33.75	36.00	38.25	40.50	42.75	45.00	67.50	90.00	135.00	180.00	225.00	450.00
46	32.20	34.50	36.80	39.10	41.40	43.70	46.00	69.00	92.00	138.00	184.00	230.00	460.00
47	32.90	35.25	37.60	39.95	42.30	44.65	47.00	70.50	94.00	141.00	188.00	235.00	470.00
48	33.60	36.00	38.40	40.80	43.20	45.60	48.00	72.00	96.00	144.00	192.00	240.00	480.00
49	34.30	36.75	39.20	41.65	44.10	46.55	49.00	73.50	98.00	147.00	196.00	245.00	490.00
50	35.00	37.50	40.00	42.50	45.00	47.50	50.00	75.00	100.00	150.00	200.00	250.00	500.00
60	42.00	45.00	48.00	51.00	54.00	57.00	60.00	90.00	120.00	180.00	240.00	300.00	600.00
70	49.00	52.50	56.00	59.50	63.00	66.50	70.00	105.00	140.00	210.00	280.00	350.00	700.00
80	56.00	60.00	64.00	68.00	72.00	76.00	80.00	120.00	160.00	240.00	320.00	400.00	800.00
90	63.00	67.50	72.00	76.50	81.00	85.50	90.00	135.00	180.00	270.00	360.00	450.00	900.00
100	70.00	75.00	80.00	85.00	90.00	95.00	100.00	150.00	200.00	300.00	400.00	500.00	1000.00



RAPID METHODS IN BUSINESS CALCULATIONS.

To Multiply any Two Numbers together, each having the same Fractions.

- Rule.*—1. Multiply the whole numbers together.
 2. Add the two numbers together and multiply this sum by either one of the fractions.
 3. Multiply the two fractions together.
 4. Add the results together.

EXAMPLE.

$$\begin{array}{r}
 12\frac{3}{4} \\
 8\frac{3}{4} \\
 \hline
 96 \\
 15 \\
 \hline
 9 \\
 16 \\
 \hline
 111\frac{9}{16} \text{ Ans.}
 \end{array}$$

How to Multiply any Mixed Numbers.

- Rule.*—1. Multiply the whole numbers together.
 2. Multiply the upper whole number by the lower fraction.
 3. Multiply the lower whole number by the upper fraction.
 4. Multiply the fractions together.
 5. Add the four products together.

EXAMPLE.—MULTIPLY $16\frac{2}{3}$ BY $9\frac{3}{4}$.

1. Whole numbers multiplied.....	144
2. Multiply 16 by $\frac{3}{4}$	12
3. Multiply 9 by $\frac{2}{3}$	6
4. Multiply $\frac{2}{3}$ by $\frac{3}{4} = \frac{1}{2}$ or	$\frac{1}{2}$
5. Add results together... ..	$162\frac{1}{2} \text{ Ans.}$

N. B.—The examples should be worked by not writing out the middle parts, but add the amounts mentally.

Business Methods for Multiplying all kinds of Mixed Numbers.

Rule.—Multiply the whole numbers together, then multiply each whole number by the fraction in the other number to its nearest unit and add the products.

NOTE.—In business it is the custom to reject fractions less than $\frac{1}{2}$ in each sum and count one for each fraction over $\frac{1}{2}$.

How much will $34\frac{3}{4}$ yards of cloth cost at $22\frac{1}{2}$ cents per yard?

Solution, $34 \times 22 = \$7.48$

$$34 \times \frac{1}{2} = .17$$

Nearest unit, $22 \times \frac{3}{4} = .16$ (We omit the fraction and call it 16.)

$$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$$

$\$7.81\frac{3}{8} \text{ Ans.}$

What is the cost of 17 dozen and 9 eggs at $12\frac{1}{2}$ cents per dozen?

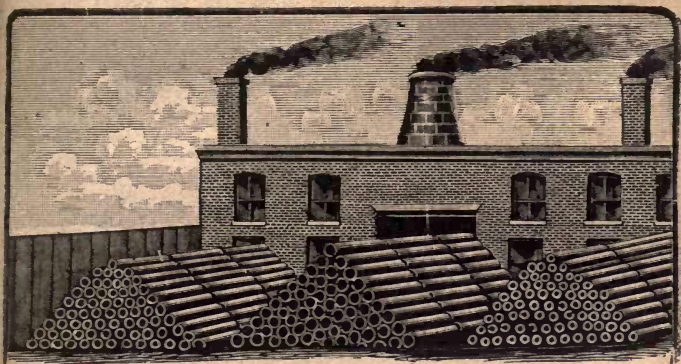
Solution, $17 \times 12 = \$2.04$

$$17 \times \frac{1}{2} = 9 \text{ (Make the } \frac{1}{2} \text{ a unit.)}$$

9 eggs = $\frac{3}{4}$ dozen, $12 \times \frac{3}{4} = 9$

$\$2.22 \text{ Ans.}$

N. B.—The last fraction in business is generally omitted.



A TILE FACTORY.

HOW TO FIND THE CARRYING CAPACITY OF TILE.

GALLONS PER MINUTE.

SIZE OF TILE.	FALL PER 100 FEET.						
	1 in.	3 in.	6 in.	9 in.	12 in.	24 in.	36 in.
3-inch	13	23	32	40	46	64	79
4-inch	27	47	66	81	93	131	163
6-inch	75	129	183	224	258	364	450
8-inch	153	265	375	460	529	750	923
9-inch	205	355	593	617	711	1006	1240
10-inch	267	463	655	803	926	1310	1613
12-inch	422	730	1033	1273	1468	2076	2551

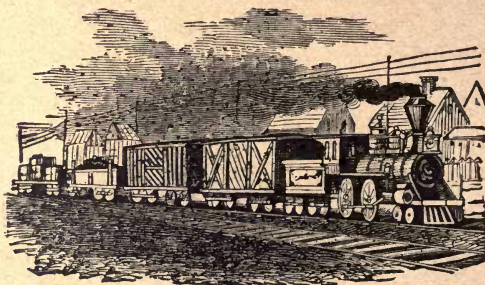
A large tile will carry more water according to its size than a small one. This is because there is less surface on the inside of the large tile compared with the size of stream, and therefore less friction. More water will flow through a straight tile than a crooked one having the same diameter.

EXAMPLE: A nine-inch tile at 6 inches fall to the 100 feet will flow 593 gals. per minute.

AREA AND WEIGHT OF TILE.

The following table shows the area and the weight of the different sized tile :

SIZE,	WEIGHT.	AREA.	SIZE.	WEIGHT.	AREA.
3 in.	5 lbs. ea.	8½ sq. in.	7 in.	15 lbs. ea.	41 sq. in.
3½ "	6 "	9½ "	8 "	18 "	53½ "
4 "	7 "	14 "	9 "	21 "	67 "
5 "	10 "	21½ "	10 "	24 "	80½ "
6 "	12 "	30½ "	12 "	28 "	113 "



CARRYING CAPACITY OF FREIGHT CARS.

ONE CAR-LOAD.

Salt.....	80 to 100 bbls.	Sheep.....	80 to 100 head.
Lumber....	8,000 to 13,000 feet.	Hay.....	10 tons.
Barley	417 to 833 bush.	Coal.....	12 to 20 tons.
Wheat	333 to 666 bush.	Stone	2 cords.
Corn	357 to 714 bush.	Tile, 3-inch...	6,000 feet.
Potatoes	333 to 666 bush.	Tile, 4-inch...	4,000 feet.
Oats.....	625 to 1,250 bush.	Tile, 6-inch...	2,500 feet.
Rye	357 to 714 bush.	Tile, 10-inch...	1,200 feet.
Cattle.....	16 to 24 head.	Tile, 12-inch...	1,000 feet.
Hogs.....	40 to 60 head.	Gravel.....	7 cubic yards.



How to Estimate the Contents of a Pile of Grain, Potatoes, Hay or Wood.

Rule.—Put the commodity in the form of a heap. Then multiply the diameter in feet by itself, and then again by the height in feet, and divide the result by 4, and you have the approximate contents in bushels.

Example:—How many bushels in a heap of grain 6 feet in diameter and 3 feet high?

Solution:— $6 \times 6 \times 3 \div 4 = 27$ bushels. Ans.

How Many Nails to the Pound.

	No. to the lb.	Length in inches.
3 penny fine.....	700	1¼
3 penny common.....	480	1¼
4 penny common.....	300	1½
6 penny common.....	160	2
8 penny common.....	92	2½
10 penny common.....	60	3
16 penny common.....	32	3½
20 penny common.....	24	4
40 penny common.....	14	5
60 penny common.....	8	6
8 penny fence.....	50	2½
10 penny fence.....	34	3



How to Figure Up a Load of Grain.

Rule.—Find the total number of pounds and divide that by the number of pounds in one bushel and it will equal the number of bushels.

Example : How many bushels in 2840 pounds of wheat, and what will it cost at 90 cents per bushel ?

Solution : $2840 \div 60 = 47$ bushel and 20 pounds or $47\frac{1}{3}$ bushels.

$$47\frac{1}{3} \times 90 \text{ c.} = \$39.60. \quad \text{Ans.}$$

How to Use the Grain Table.

The heavy type column represents the weight of the load, and the number of bushels and pounds are at the right under the kind of grain. See example at the foot of next page.

How to Find the Number of Bushels in a Load of Grain at Sight.

W'g't.	Oats. 32 lbs.	Corn, Rye. 56 lbs.	Barley. 48 lbs.	Wheat. 60 lbs.	W'g't.	Oats. 32 lbs.	Corn, Rye. 56 lbs.	Barley. 48 lbs.	Wheat. 60 lbs.
Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.
1500	46 28	26 44	31 12	25 00	2000	62 16	35 40	41 32	33 20
1510	47 06	26 54	31 22	25 10	2010	62 26	35 50	41 42	33 30
1520	47 16	27 08	31 32	25 20	2020	63 04	36 04	42 04	33 40
1530	47 26	27 18	31 42	25 30	2030	63 14	36 14	42 14	33 50
1540	48 04	27 28	32 04	25 40	2040	63 24	36 24	42 24	34 00
1550	48 14	27 38	32 14	25 50	2050	64 02	36 34	42 34	34 10
1560	48 24	27 48	32 24	26 00	2060	64 12	36 44	42 44	34 20
1570	49 02	28 02	32 34	26 10	2070	64 22	36 54	43 06	34 30
1580	49 12	28 12	32 44	26 20	2080	65 00	37 08	43 16	34 40
1590	49 22	28 22	33 06	26 30	2090	65 10	37 18	43 26	34 50
1600	50 00	28 32	33 16	26 40	2100	65 20	37 28	43 36	35 00
1610	50 10	28 42	33 26	26 50	2110	65 30	37 38	43 46	35 10
1620	50 20	28 52	33 36	27 00	2120	66 08	37 48	44 08	35 20
1630	50 30	29 06	33 46	27 10	2130	66 18	38 02	44 18	35 30
1640	51 08	29 16	34 08	27 20	2140	66 28	38 12	44 28	35 40
1650	51 18	29 26	34 18	27 30	2150	67 06	38 22	44 38	35 50
1660	51 28	29 36	34 28	27 40	2160	67 16	38 32	45 00	36 00
1670	52 06	29 46	34 38	27 50	2170	67 26	38 42	45 10	36 10
1680	52 16	30 00	35 00	28 00	2180	68 04	38 52	45 20	36 20
1690	52 26	30 10	35 10	28 10	2190	68 14	39 06	45 30	36 30
1700	53 04	30 20	35 20	28 20	2200	68 24	39 16	45 40	36 40
1710	53 14	30 30	35 30	28 30	2210	69 02	39 26	46 02	36 50
1720	53 24	30 40	35 40	28 40	2220	69 12	39 36	46 12	37 00
1730	54 02	30 50	36 02	28 50	2230	69 22	39 46	46 22	37 10
1740	54 12	31 04	36 12	29 00	2240	70 00	40 00	46 32	37 20
1750	54 22	31 14	36 22	29 10	2250	70 10	40 10	46 42	37 30
1760	55 00	31 24	36 32	29 20	2260	70 20	40 20	47 04	37 40
1770	55 10	31 34	36 42	29 30	2270	70 30	40 30	47 14	37 50
1780	55 20	31 44	37 04	29 40	2280	71 08	40 40	47 24	38 00
1790	55 30	31 54	37 14	29 50	2290	71 18	40 50	47 34	38 10
1800	56 08	32 08	37 24	30 00	2300	71 28	41 04	47 44	38 20
1810	56 18	32 18	37 34	30 10	2310	72 06	41 14	48 06	38 30
1820	56 28	32 28	37 44	30 20	2320	72 16	41 24	48 16	38 40
1830	57 06	32 38	38 06	30 30	2330	72 26	41 34	48 26	38 50
1840	57 16	32 48	38 16	30 40	2340	73 04	41 44	48 36	39 00
1850	57 26	33 02	38 26	30 50	2350	73 14	41 54	48 46	39 10
1860	58 04	33 12	38 36	31 00	2360	73 24	42 08	49 08	39 20
1870	58 14	33 22	38 46	31 10	2370	74 02	42 18	49 18	39 30
1880	58 24	33 32	39 08	31 20	2380	74 12	42 28	49 28	39 40
1890	59 02	33 42	39 18	31 30	2390	74 22	42 38	49 38	39 50
1900	59 12	33 52	39 28	31 40	2400	75 00	42 48	50 00	40 00
1910	59 22	34 06	39 38	31 50	2410	75 10	43 02	50 10	40 10
1920	60 00	34 16	40 00	32 00	2420	75 20	43 12	50 20	40 20
1930	60 10	34 26	40 10	32 10	2430	75 30	43 22	50 30	40 30
1940	60 20	34 36	40 20	32 20	2440	76 08	43 32	50 40	40 40
1950	60 30	34 46	40 30	32 30	2450	76 18	43 42	51 02	40 50
1960	61 08	35 00	40 40	32 40	2460	76 28	43 52	51 12	41 00
1970	61 18	35 10	41 02	32 50	2470	77 06	44 06	51 22	41 10
1980	61 28	35 20	41 12	33 00	2480	77 16	44 16	51 32	41 20
1990	62 06	35 30	41 22	33 10	2490	77 26	44 26	51 42	41 30
					2500	78 04	44 36	52 04	41 40

*Example:—*How many bushels of oats in 2,490 pounds?

*Answer:—*77 bushels and 26 pounds.

How to Find the Number of Bushels in a Load of Grain at Sight.

W'g't.	Oats. 32 lbs.	Corn, Rye 56 lbs.	Barley. 48 lbs.	Wheat. 60 lbs.	W'g't.	Oats. 32 lbs.	Corn, Rye 56 lbs.	Barley. 48 lbs.	Wheat. 60 lbs.
	Bus. Lbs.	Bus. Lbs.	Bus. Lbs.	Bus. Lbs.		Bus. Lbs.	Bus. Lbs.	Bus. Lbs.	Bus. Lbs.
2510	78 14	44 46	52 14	41 50	3010	94 02	53 42	62 34	50 10
2520	78 24	45 00	52 24	42 00	3020	94 12	53 52	62 44	50 20
2530	79 02	45 10	52 34	42 10	3030	94 22	54 06	63 06	50 30
2540	79 12	45 20	52 44	42 20	3040	95 00	54 16	63 16	50 40
2550	79 22	45 30	53 06	42 30	3050	95 10	54 26	63 26	50 50
2560	80 00	45 40	53 16	42 40	3060	95 20	54 36	63 36	51 00
2570	80 10	45 50	53 26	42 50	3070	95 30	54 46	63 46	51 10
2580	80 20	46 04	53 36	43 00	3080	96 08	55 00	64 08	51 20
2590	80 30	46 14	53 46	43 10	3090	96 18	55 10	64 18	51 30
2600	81 08	46 24	54 08	43 20	3100	96 28	55 20	64 28	51 40
2610	81 18	46 34	54 18	43 30	3110	97 06	55 30	64 38	51 50
2620	81 28	46 44	54 28	43 40	3120	97 16	55 40	65 00	52 00
2630	82 06	46 54	54 38	43 50	3130	97 26	55 50	65 10	52 10
2640	82 16	47 08	55 00	44 00	3140	98 04	56 04	65 20	52 20
2650	82 26	47 18	55 10	44 10	3150	98 14	56 14	65 30	52 30
2660	83 04	47 28	55 20	44 20	3160	98 24	56 24	65 40	52 40
2670	83 14	47 38	55 30	44 30	3170	99 02	56 34	66 02	52 50
2680	83 24	47 48	55 40	44 40	3180	99 12	56 44	66 12	53 00
2690	84 02	48 02	56 02	44 50	3190	99 22	56 54	66 22	53 10
2700	84 12	48 12	56 12	45 00	3200	100 00	57 08	66 32	53 20
2710	84 22	48 22	56 22	45 10	3210	100 10	57 18	66 42	53 30
2720	85 00	48 32	56 32	45 20	3220	100 20	57 28	67 04	53 40
2730	85 10	48 42	56 42	45 30	3230	100 30	57 38	67 14	53 50
2740	85 20	48 52	57 04	45 40	3240	101 08	57 48	67 24	54 00
2750	85 30	49 06	57 14	45 50	3250	101 18	58 02	67 34	54 10
2760	86 08	49 16	57 24	46 00	3260	101 28	58 12	67 44	54 20
2770	86 18	49 26	57 34	46 10	3270	102 06	58 22	68 06	54 30
2780	86 28	49 36	57 44	46 20	3280	102 16	58 32	68 16	54 40
2790	87 06	49 46	58 06	46 30	3290	102 26	58 42	68 26	54 50
2800	87 16	50 00	58 16	46 40	3300	103 04	58 52	68 36	55 00
2810	87 26	50 10	58 26	46 50	3310	103 14	59 06	69 46	55 10
2820	88 04	50 20	58 36	47 00	3320	103 24	59 16	69 08	55 20
2830	88 14	50 30	58 46	47 10	3330	104 02	59 26	69 18	55 30
2840	88 24	50 40	59 08	47 20	3340	104 12	59 36	69 28	55 40
2850	89 02	50 50	59 18	47 30	3350	104 22	59 46	69 38	55 50
2860	89 12	51 04	59 28	47 40	3360	105 00	60 00	70 00	56 00
2870	89 22	51 14	59 38	47 50	3370	105 10	60 10	70 10	56 10
2880	90 00	51 24	60 00	48 00	3380	105 20	60 20	70 20	56 20
2890	90 10	51 34	60 10	48 10	3390	105 30	60 30	70 30	56 30
2900	90 20	51 44	60 20	48 20	3400	106 08	60 40	71 00	56 40
2910	90 30	51 54	60 30	48 30	3410	106 18	60 50	71 02	56 50
2920	91 08	52 08	60 40	48 40	3420	106 28	61 04	71 12	57 00
2930	91 18	52 18	61 02	48 50	3430	107 06	61 14	71 22	57 10
2940	91 28	52 28	61 12	49 00	3440	107 16	61 24	71 32	57 20
2950	92 06	52 38	61 22	49 10	3450	107 26	61 34	72 42	57 30
2960	92 16	52 48	61 32	49 20	3460	108 04	61 44	72 04	57 40
2970	92 26	53 02	61 42	49 30	3470	108 14	61 54	72 14	57 50
2980	93 04	53 12	62 04	49 40	3480	108 24	62 08	72 24	58 00
2990	93 14	53 22	62 14	49 50	3490	109 02	62 18	72 34	58 10
3000	93 24	53 32	62 24	50 00	3500	109 12	62 28	72 44	58 20

NUMBER OF POUNDS TO THE BUSHEL, LEGAL WEIGHT, IN DIFFERENT STATES.

STATES.	Wheat.	Rye.	Oats.	Barley.	Buckwheat.	Shelled Corn.	Corn on the Cob.	Corn Meal.	Potatoes.	Sweet Potatoes.	Turnips.	Beans.	Peas.	Dried Apples.	Dried Peaches.	Flax Seed.	Timothy Seed.	Blue Grass Seed.	Clover Seed.	Anthracite Coal.	Millet.
Arkansas.....	60	56	32	48	52	.....	70	50	60	50	.....	60	46	24	33	56	45	14	60	80	50
California.....	60	54	32	50	40	52	.....	50	60	.....	50	60	60	.....	.....	56	45	14	60	80	50
Connecticut.....	60	56	32	48	48	56	.....	50	60	55	50	60	60	24	33	56	45	14	60	80	50
Georgia.....	60	56	32	47	52	56	70	48	60	55	57	60	.....	25	33	56	45	14	60	80	50
Illinois.....	60	56	32	48	52	56	68	50	60	55	48	60	.....	24	33	56	45	14	60	80	50
Indiana.....	60	56	32	48	50	56	70	50	60	46	57	60	.....	24	33	56	45	14	60	80	50
Iowa.....	60	56	32	48	52	56	70	50	60	50	57	60	60	24	33	56	45	14	60	80	50
Kansas.....	60	56	32	48	50	56	70	50	60	50	57	60	60	24	33	56	45	14	60	80	50
Kentucky.....	60	56	32	47	55	55	70	50	60	55	57	60	60	24	39	56	45	14	60	76	50
Louisiana.....	60	32	32	32	.....	56	.....	60	60	.....	.....	60	60	.....	.....	.....	45	14	60	.....	.....
Maine.....	60	50	30	48	48	56	.....	50	60	.....	52	60	60	.....	.....	.....	.....	.....	.....	.....	.....
Massachusetts.....	60	56	32	48	48	56	.....	50	60	56	52	60	60	22	28	56	45	14	60	.....	.....
Michigan.....	60	56	32	48	48	56	70	50	60	56	54	60	60	28	28	56	45	14	60	60	.....
Minnesota.....	60	56	32	48	42	56	.....	60	60	.....	.....	60	60	24	33	56	45	14	60	80	.....
Missouri.....	60	56	32	48	52	56	.....	60	60	.....	57	60	60	.....	.....	56	45	14	60	80	.....
Mississippi.....	60	32	30	32	.....	56	.....	60	60	.....	.....	60	60	.....	.....	56	45	14	60	80	.....
Nebraska.....	60	56	32	48	52	56	70	50	60	50	55	60	60	24	33	56	45	14	60	80	50
New Hampshire.....	60	56	32	.....	.....	56	.....	50	60	.....	.....	60	60	.....	.....	55	44	.....	64	.....	.....
New Jersey.....	60	56	30	48	50	56	.....	60	60	54	57	62	60	25	33	55	55	.....	64	.....	.....
New York.....	60	56	32	48	48	56	.....	46	60	.....	.....	60	60	.....	.....	56	45	.....	60	.....	.....
North Carolina.....	60	56	30	48	50	54	.....	.....	60	.....	.....	60	60	22	33	56	45	.....	60	.....	50
North Dakota.....	60	56	32	48	42	56	.....	.....	60	50	50	60	60	28	28	56	40	.....	60	.....	.....
Ohio.....	60	56	33	48	50	56	70	.....	60	50	50	60	60	28	28	56	40	.....	60	.....	.....
Oregon.....	60	56	36	45	42	56	.....	.....	60	.....	.....	60	60	.....	.....	.....	.....	.....	62	.....	.....
Pennsylvania.....	60	56	32	47	48	56	.....	56	60	.....	.....	60	60	.....	.....	.....	.....	.....	60	.....	.....
Rhode Island.....	60	56	32	48	.....	56	.....	50	60	.....	50	60	60	26	33	44	.....	14	60	.....	.....
South Carolina.....	60	56	33	48	56	56	70	50	60	50	57	60	60	26	33	56	45	14	60	.....	.....
South Dakota.....	60	56	32	48	42	56	72	50	60	50	56	60	60	26	33	56	45	.....	60	.....	.....
Tennessee.....	60	56	32	48	50	56	.....	50	60	50	56	60	60	28	32	56	45	.....	60	80	50
Vermont.....	60	56	32	48	46	52	.....	50	60	56	57	60	60	28	32	56	45	14	60	80	50
Virginia.....	60	56	32	48	52	56	70	50	60	56	57	60	60	28	32	56	40	.....	60	80	50
Washington.....	50	56	36	46	42	56	.....	50	60	.....	50	60	60	28	28	56	40	.....	60	80	50
Wisconsin.....	60	56	32	48	50	56	70	.....	60	.....	57	60	60	28	28	56	45	.....	60	.....	.....

How to Find the Cost of Coal, Hay, Etc., at Sight.

COST PER POUND OR TON.

No.	¢	¢	¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢	\$ ¢
Lbs.	25	50	75	1 00	2 00	3 00	4 00	5 00	6 00	7 00	8 00	9 00	10 00	11 00	12 00		
3							1	1	1	1	1	1	2	2	2		
7					1	1	1	2	2	2	3	3	4	4	4		
10				1	1	2	2	3	3	4	4	5	5	6	6		
20		1	1	1	2	3	4	5	6	7	8	9	10	11	12		
30		1	1	2	3	5	6	8	9	11	12	14	15	17	18		
40	1	1	2	2	4	6	8	10	12	14	16	18	20	22	24		
50	1	1	2	3	5	8	10	13	15	18	20	23	25	28	30		
60	1	2	2	3	6	9	12	15	18	21	24	27	30	33	36		
70	1	2	3	4	7	11	14	18	21	25	28	32	35	39	42		
80	1	2	3	4	8	12	16	20	24	28	32	36	40	44	48		
90	1	2	3	5	9	14	18	23	27	32	36	41	45	50	54		
100	1	3	4	5	10	15	20	25	30	35	40	45	50	55	60		
200	3	5	8	10	20	30	40	50	60	70	80	90	1 00	1 10	1 20		
300	4	8	11	15	30	45	60	75	90	1 05	1 20	1 35	1 50	1 65	1 80		
400	5	10	15	20	40	60	80	1 00	1 20	1 40	1 60	1 80	2 00	2 20	2 40		
500	6	13	19	25	50	75	1 00	1 25	1 50	1 75	2 00	2 25	2 50	2 75	3 00		
600	8	15	23	30	60	90	1 20	1 50	1 80	2 10	2 40	2 70	3 00	3 30	3 60		
700	9	18	26	35	70	1 05	1 40	1 75	2 10	2 45	2 80	3 15	3 50	3 85	4 20		
800	10	20	30	40	80	1 20	1 60	2 00	2 40	2 80	3 20	3 60	4 00	4 40	4 80		
900	11	23	34	45	90	1 35	1 80	2 25	2 70	3 15	3 60	4 05	4 50	4 95	5 40		
1000	13	25	38	50	1 00	1 50	2 00	2 50	3 00	3 50	4 00	4 50	5 00	5 50	6 00		
1100	14	28	41	55	1 10	1 65	2 20	2 75	3 30	3 85	4 40	4 95	5 50	6 05	6 60		
1200	15	30	45	60	1 20	1 80	2 40	3 00	3 60	4 20	4 80	5 40	6 00	6 60	7 20		
1300	16	33	49	65	1 30	1 95	2 60	3 25	3 90	4 55	5 20	5 85	6 50	7 15	7 80		
1400	18	35	53	70	1 40	2 10	2 80	3 50	4 20	4 90	5 60	6 30	7 00	7 70	8 40		
1500	19	38	56	75	1 50	2 25	3 00	3 75	4 50	5 25	6 00	6 75	7 50	8 25	9 00		
1600	20	40	60	80	1 60	2 40	3 20	4 00	4 80	5 60	6 40	7 20	8 00	8 80	9 60		
1700	21	43	64	85	1 70	2 55	3 40	4 25	5 10	5 95	6 80	7 65	8 50	9 35	10 20		
1800	23	45	68	90	1 80	2 70	3 60	4 50	5 40	6 30	7 20	8 10	9 00	9 90	10 80		
1900	24	48	71	95	1 90	2 85	3 80	4 75	5 70	6 65	7 60	8 55	9 50	10 45	11 40		
1 TON	25	50	75	1 00	2 00	3 00	4 00	5 00	6 00	7 00	8 00	9 00	10 00	11 00	12 00		
2 "	50	1 00	1 50	2 00	4 00	6 00	8 00	10 00	12 00	14 00	16 00	18 00	20 00	22 00	24 00		
3 "	75	1 50	2 25	3 00	6 00	9 00	12 00	15 00	18 00	21 00	24 00	27 00	30 00	33 00	36 00		
4 "	1 00	2 00	3 00	4 00	8 00	12 00	16 00	20 00	24 00	28 00	32 00	36 00	40 00	44 00	48 00		
5 "	1 25	2 50	3 75	5 00	10 00	15 00	20 00	25 00	30 00	35 00	40 00	45 00	50 00	55 00	60 00		

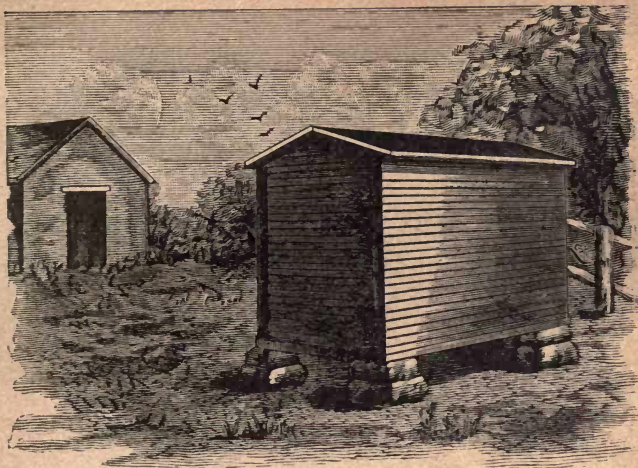
Example: What is the cost of 1300 pounds of coal at \$4.50 per ton?

$$\begin{array}{rcl} \text{Solution: } 1300 \text{ lbs. @ } \$4.00 & = & 2.60 \\ 1300 \text{ lbs. @ } 50c & = & .30 \\ \hline & & 2.93 \end{array}$$

2.93 Ans.

Example: What is the cost of 1740 pounds of Hay at \$8.00 per ton?

$$\text{Solution: } 1740 \times 8 \div 2 = \$6.96. \text{ Ans.}$$



How to Measure Ear Corn in a Crib.

A bushel of corn means, either a bushel of shelled corn, or ear corn enough to make a bushel of shelled corn.

Rule.—Multiply the length in feet by the height in feet, and that again by the width in feet, multiply the result by 4, and cut off the right hand figure, and you have the contents in bushels of shelled corn.

Example : How many bushels of shelled corn in a crib of corn in the ear, 20 feet long, 10 feet high, and 8 feet wide ?

Solution : $20 \times 10 \times 8 \times 4 = 640.0$ bushels. **Ans.** This is counting $2\frac{1}{2}$ cubic feet to the bushel.

If the corn is medium good use the above rule. If good sound corn well settled multiply by 5 and cut off one figure instead of multiplying by 4.

When the crib is flared at the side multiply half the sum of the top and bottom widths in feet by the perpendicular height in feet, and then again by the length in feet, and then multiply the result by 4, and cut off the right hand figure.

Example : What is the contents of a crib 10 feet wide at the top, 6 feet wide at the bottom, 12 feet long, and 10 feet high ?

Solution : $10 + 6 : 2 = 8$ feet average width. Then $12 \times 10 \times 8 \times 4 = 384.0$ bushels of shelled corn.

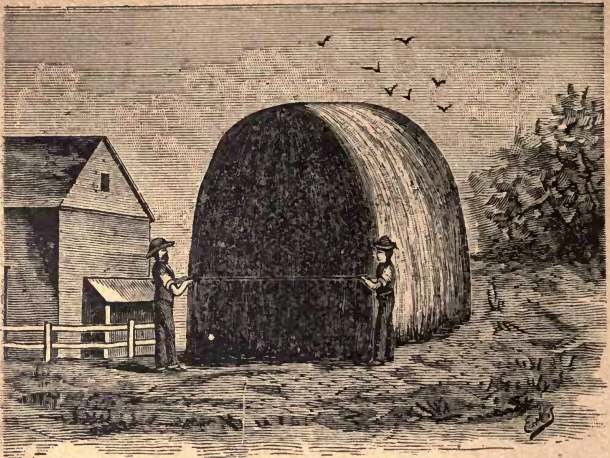
HOW TO FIND THE NUMBER OF HEAPED BUSHELS OF EAR CORN, APPLES OR POTATOES IN A CRIB OR BIN.

Rule.—Multiply the length in feet by the breadth in feet, and that again by the height in feet, and multiply the result by 6, and cut off the right hand figure, and that will equal the number of heaped bushels.

Example : How many bushels of potatoes in a bin 10 feet long, 8 feet wide, and 7 feet high ?

Solution : $10 \times 8 \times 7 \times 6 = 336.0$ heaped bushels.

N. B.—Deduct $\frac{1}{8}$ for shuck.



How to Measure Hay in the Mow or Stack.

A ton of dry hay is variously estimated from 400 to 500 cubic feet to the ton.

To be on the safe side, it is best to estimate about 500 cubic feet to the ton.

HAY IN A MOW.

Rule.—Multiply the length in feet by the height in feet, and this by the breadth in feet, and divide the result by 500, and you have the number of tons.

Example: How many tons of hay in a mow 20 feet long, 10 feet high, and 15 feet wide?

Solution: $20 \times 10 \times 15 \div 500 = 6$. Ans.

HOW TO ESTIMATE THE NUMBER OF TONS IN A STACK.

Rule.—Multiply the length in feet by the width in feet, and this by one-half the height, and divide the product by 300.

Example: How many tons of hay in a stack 20 feet long, 12 feet high, and 15 feet wide?

Solution: $20 \times 6 \times 15 \div 300 = 6$ tons. Ans.

HOW TO ESTIMATE THE CONTENTS OF A ROUND STACK.

Rule.—Multiply the square of the distance around the stack in yards by 4 times the height in yards, and point off two places from the right, and this will be the number of cubic yards in the stack, which divided by 20 will equal the number of tons.

Example: How many tons of hay in a stack, distance around the bulge, 25 yards, and height, 9 yards?

Solution: $25 \times 25 = 625$, then $625 \times 36 = 22,500$, pointing off two places makes 225, then $225 \div 20 = 11\frac{1}{4}$ tons. Ans.

HOW TO ESTIMATE THE CONTENTS OF A ROUND STACK.

Rule—Multiply the square of the distance around the stack in yards by 4 times the height in yards, and point off two places from the right, and this will be the number of cubic yards in a stack, which divided by 20 will equal the number of tons.

Example: How many tons of hay in a stack, distance around the bulge 25 yards and height 9 yards?

Solution: $25 \times 25 = 625$, then $625 \times 36 = 22,500$, pointing off two places, making 225, then $225 \div 20 = 11\frac{1}{4}$ tons. Ans.

HOW MUCH ADVANTAGE IS GIVEN BY CHANGING THE EVENER.



Caution.—In moving the center pin of an evener one inch toward one of the end pins it changes the draft twice as much as it does to move one of the end pins one inch toward the center pin. Or in other words, moving the center pin changes the draft twice as much as changing one of the end pins or clevises.

An average evener is 42 inches in length.

Now if the center pin is moved one inch from the center to the right or left, the horse drawing on the short end will pull about $\frac{1}{20}$ more than the horse drawing on the opposite end.

If one of the end pins is moved one inch the difference will be about $\frac{1}{40}$.

Example: If a team of horses draw 2000 pounds, and the center pin is moved one inch from the center, what part of the whole load will each draw?

$$2000 \times \frac{1}{20} = 100 \text{ pounds, the difference.}$$

$$100 + 1000 = 1100 \text{ pounds.}$$

$$1000 - 100 = 900 \text{ pounds.}$$

Hence the horse at the short end of the evener draws 1100 lbs., and the other horse draws 900 lbs.

The draught on a 14-inch plow plowing 4 inches deep, is about 1000 lbs.; 5 inches deep, 1250 lbs.; 6 inches deep, 1500 lbs.



Facts Concerning Stone-work, Brick-Work and Plastering.

STONE-WORK.

1. A cord of stone, three bushels of lime and a cubic yard of sand will make 100 cubic feet of wall.
2. One cubic foot of stone-work weighs from 130 to 175 pounds.

BRICK-WORK.

3. Five courses of brick will make one foot in height on a chimney.
4. One cubic foot of brick-work with common mortar weighs from 100 to 110 pounds.
5. A cask of lime will make mortar sufficient for 1000 bricks.

FOR PLASTERING.

6. Six bushels of lime, 40 cubic feet* of sand, and $1\frac{1}{2}$ bushels of hair will plaster 100 square yards with two coats of mortar.

* N. B.—There are about $1\frac{1}{4}$ cubic feet in a bushel.

Short Method of Estimating Stone-work.

Rule.—Multiply the length in feet by the height in feet, and that by the thickness in feet, and divide this result by 22, and the quotient will be the number of perches of stone in the wall.

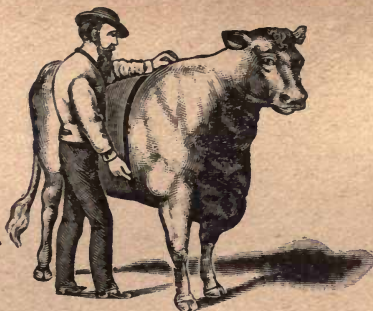
Example: A wall is $4 \times 15 \times 2 = 120$ the solid contents.
 $120 \div 22 = 5\frac{5}{11}$ perches.

N. B.—In a perch of stone there are $24\frac{3}{4}$ cubic feet, but $23\frac{1}{4}$ cubic feet are generally allowed for the mortar and filling.

How to find the Number of Cord Stone to Build Cellar and Barn Walls.

RULE.—Multiply the length, height and thickness together in feet and divide the result by 100.

N. B.—There are 128 cubic feet in a cord, but the mortar and sand make it necessary to use but 100 cubic feet of stone.



How to Find the Weight of Cattle by Measurement.

To find the approximate weight, measure as follows: 1. The girth behind the shoulders. 2. The length from the fore-part of the shoulder-blade along the back to the bone at the tail, in a vertical line with the buttocks. Then multiply the square of the girth in feet by five times the length in feet. Divide the product by 1.5 for average cattle, (if cattle be very fat, by 1.425; if very lean, by 1.575; and the quotient will be the dressed weight of the quarters. Thus: the girth of a steer is 6.5 feet, and the length from the shoulder-blade to the tail bone is 5.25. The square of 6.5 is 42.25, and 5 times 5.25 is 26.25. Multiplying these together gives 1109.0625, which, when divided by 1.5, produces 739.375 lbs. the approximate net weight of the steer after being dressed.

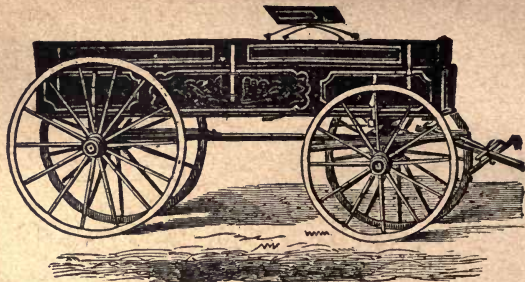
THE SHORT METHOD.

Multiply the length around the animal (back of the fore-shoulder) by itself, then multiply that result by 7 and divide the product thus obtained by 2, and you have the weight of the animal (nearly).

How to Find the Amount of Paper to Paper a Room.

Measure the distance around the room; deduct the width of each window and door; take $\frac{3}{8}$ of the result, and it will equal the number of strips required. Divide the result thus found by the number of strips that can be cut from one roll, and it will equal the number of rolls required to paper the room.

Each roll is $1\frac{1}{2}$ feet wide, 24 feet long and contains 36 square feet or 4 square yards.



How to Find the Contents of a Wagon Box.

A common Wagon Box is a little more than ten feet long and three feet wide, and will hold about two bushels for every inch in depth.

Rule.—Multiply the depth of the wagon box in inches by 2, and you have the number of bushels.

If the wagon box is 11 feet long, multiply the depth in inches by 2, and add one-tenth of the number of bushels to itself.

Example : How many bushels of grain will a wagon box hold 22 inches deep and 10 feet long ?

Solution : $22 \times 2 = 44$. Ans.

N. B.—A bushel to the inch is calculated for corn on the cob.

How to Find the Number of Bushels of Grain in a Bin or Box.

Rule.—Multiply the length in feet by the height in feet, and then again by the breadth in feet, and then again by 8, and cut off the right hand figure. The last result will be the number of bushels.

Example : How many bushels in a bin 12 feet long, 10 feet wide, and 6 feet high ?

Solution : $12 \times 10 \times 6 \times 8 = 576.0$. Ans.

NOTE.—For exact results multiply the length in inches by the height in inches, and that again by the width in inches, and divide the result by 2150.4, the number of cubic inches in a bushel.

BUSHEL.

The dimensions of the bushel are $18\frac{1}{2}$ inches inner diameter; $19\frac{1}{2}$ inches outer diameter, and 8 inches deep; and when heaped, the cone is not to be less than 6 inches high; which makes a heaped bushel equal to $1\frac{1}{4}$ struck ones. To reduce U. S. dry measures to British ones of the same name, divide by 1.031516; to reduce British ones to U. S., multiply by 1.031516; or for common purposes use 1.032.



FINDING THE CONTENTS OF A BARREL. BARRELS.

In measuring cisterns, reservoirs, vats, etc., the barrel is estimated at $31\frac{1}{2}$ gallons, and the hogshead at 63 gallons.

A gallon of water weighs nearly $8\frac{1}{8}$ pounds, avoirdupois.

A pint is generally estimated as a pound.

How to Find the Contents of Barrels and Casks.

Rule.—Add together the diameters of the bung and head in inches, and divide the sum by 2, and its result will equal the average diameter. Then multiply the square of the average diameter by the length in inches and multiply this result by 34 and cut off the four right hand figures, and you will have the number of gallons.

Example: How many gallons in a barrel whose bung diameter is 22 inches, head diameter 18 inches, and length 30 inches?

Solution: $22 + 18 \div 2 = 20$, average diameter. $20 \times 20 \times 30 \times 34 = 40.8000$, or $40\frac{4}{5}$ gallons.

NOTE.—Barrels used in commerce are made in various sizes, from 30 to 50 gallons. There is no definite measure called a hogshead, they are usually gauged, and have their capacities in gallons marked on them.



How to Find the Contents of a Round Tank.

Multiply the square of the diameter in feet by the depth in feet, and multiply this result by 6, and you have the approximate contents of the tank in gallons. (For exact results multiply the product by $5\frac{7}{8}$, instead of 6.)

Example : How many gallons will a tank hold 6 feet in diameter and 8 feet deep ?

$$\text{Solution : } 6 \times 6 \times 8 = 288.$$

$$288 \times 6 = 1728 \text{ gallons. Ans.}$$

NOTE.—If the tank is larger at the bottom than at the top, find the average diameter by measuring the middle part of the tank, half way between the top and bottom.

FOR MORE EXACT RESULTS.

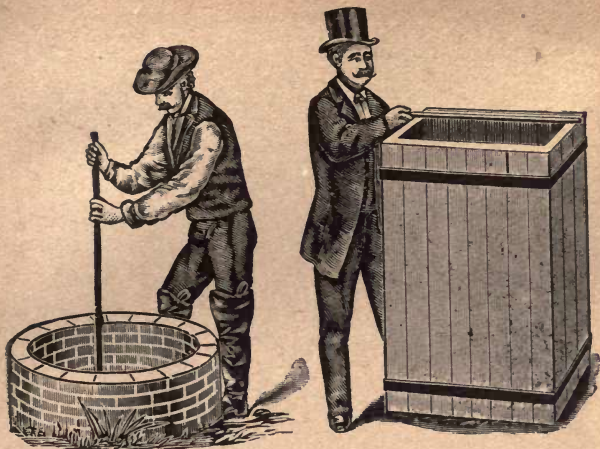
Rule.—Multiply the square of the diameter in feet, and multiply this result by 47, and divide the product by 8, and you will have the number of gallons.

NOTE.—In calculating the capacity of tanks, $31\frac{1}{2}$ gallons are estimated to one barrel, and 63 gallons to one hogshead.

A TABLE FOR CIRCULAR TANKS ONE FOOT IN DEPTH.

Five feet in diameter holds	$4\frac{1}{2}$ barrels.
Six feet in diameter holds.....	$6\frac{3}{4}$ “
Seven feet in diameter holds.....	9 “
Eight feet in diameter holds.....	12 “
Nine feet in diameter holds.	15 “
Ten feet in diameter holds.....	$19\frac{1}{2}$ “

N. B.—To find the contents of a tank by the table, multiply the contents of one foot in depth by the number of feet deep.



Shorter Forms of How to Find the Contents of Cylindrical Cisterns, Tanks, Etc.

If you cut the largest possible square from a circle drawn on paper, the square will be a little more than $\frac{3}{4}$ of the whole circle. Therefore, to find the area of a circle, take $\frac{3}{4}$ of the square of the diameter (or for exactness .78) and the result will be the area of the circle.

Rule.—Multiply the square of the diameter of the cistern in feet, by the height in feet, and divide this result by 5, and it will equal the number of barrels the cistern will hold (approximately). (Or for exact results, instead of dividing by 5, take $\frac{3}{16}$ of the product.

Example: A cistern is 5 feet in diameter, and 8 feet deep. How many barrels will it hold?

Solution: $5 \times 5 \times 8 = 200$.

$200 \div 5 = 40$ barrels. **Ans.**

To find the number of gallons, multiply by $31\frac{1}{2}$.

To Find the Number of Barrels in a Square Cistern.

Multiply the height, width and depth together, and divide the product obtained by 4 (or for exactness, by 4.2), and the result will equal the number of barrels of $31\frac{1}{2}$ gals. each, the cistern will hold.

Example: $4 \times 8 \times 5 = 160$.

$160 \div 4 = 40$ barrels.



How to Find the Contents of a Watering-Trough.

Rule.—Multiply the height in feet by the length in feet, and the product by the width in feet, and divide the result by 4, and you will have the contents in barrels or $31\frac{1}{2}$ gallons each.

Example : What is the contents of a watering trough 8 feet long, 4 feet wide, and 3 feet deep ?

Solution : $3 \times 4 \times 8 \div 4 = 24$ barrels.

NOTE.—For exact results multiply the length in inches by the height in inches, by the width in inches, and divide the result by 231, and you will have the contents in gallons.

Table for Finding the Contents of Square Tanks.

A Tank Five feet by five feet holds	6	barrels.
“ Six feet by six feet holds	$8\frac{1}{2}$	“
“ Seven feet by seven feet holds....	$11\frac{1}{2}$	“
“ Eight feet by eight feet holds.....	$15\frac{1}{4}$	“
“ Nine feet by nine feet holds.....	$19\frac{1}{2}$	“
“ Ten feet by ten feet holds.....	$23\frac{3}{4}$	“

The above table is for one foot of depth only.

To find the contents of a trough, measure its depth in feet and multiply it by the contents of one foot in depth.



BRICK.

Common brick are usually 8 inches long, 4 inches wide, and 2 inches thick, and masons generally estimate $22\frac{1}{2}$ brick to the cubic foot. One-sixth of the space is generally given to mortar.

The following rule is generally used by builders, as some allowance must be made for broken and lost brick in putting up a building:

How to Find the Number of Common Brick in a Wall or Building.

A BRICK is 8 inches long, 4 inches wide and two inches thick, and contains 64 cubic inches. Twenty-seven brick make one cubic foot of wall without mortar, and it takes from 20 to 22 bricks according to the amount of mortar used to make a cubic foot of wall with mortar.

Rule—Multiply the length of the wall in feet by the height in feet, and that by its thickness in feet, and then multiply that result by 20, and the product will be the number of bricks in the wall.

Example: How many bricks in a wall 3 feet long, 20 feet high, and 18 inches thick?

Solution: $30 \text{ length} \times 20 \text{ height} \times 1\frac{1}{2} \text{ thick} = 900 \times 20 = 18,000.$ Ans.

N. B.—For a wall 8 inches thick, multiply the length in feet by the height in feet, and that result by 15, and the product will equal the number of bricks.

When doors and windows occur in the wall, multiply their height, width and thickness together, and deduct the amount from the solid contents of the wall before multiplying by 20 or 15, as the case may be.



How to Measure a Day's Work in the Corn-Field.

If the corn is 3 ft. and 8 inches each way in rows, as is usually the case, it will take 3,240 *hills of corn* to make an acre.

Rule.—Count the hills in one row, multiply that sum by the number of rows, and divide that result by 3,240, and the result obtained will equal the number of acres.

Example : A field contains 40 rows of corn, and each row contains 810 hills. How many acres in the field ?

Solution : $810 \times 40 = 32,400$ total number of hills.

$32,400 \div 3,240 = 10$ the number of acres.

THREE FEET APART.

If plants or hills are three feet apart each way, it will take 4,840 hills to the acre.

SHOCKED CORN.

Eight hills each way, or 64 hills, are usually cut for one shock. If the rows are 3 ft. 8 inch. apart each way, it will require 50 shock to make one acre of corn.

NOTE.—It is generally estimated that two bushels of corn on the cob will make one bushel of shelled corn.



How to Find the Number of Yards of Carpet to Cover a Floor.

Rule.—Multiply the length of the room in feet by the width in feet, and divide the result by the number of square feet in one yard of carpeting, and the result will equal the number of yards of carpeting it will take to cover the floor.

NOTE.—To find the number of square feet in one yard of carpet, multiply the width of your carpet by 3 (the length of one yard), and the result will be the number of square feet in one yard.

Or for greater accuracy, multiply the length of the room in inches by the width in inches, and divide the result by the number of square inches in one yard of your carpet.

Or divide the width of your carpet in inches into the width of the room in inches, and the result will be the number of strips, multiply the number of strips by the length of your room, and the result will equal the number of yards of carpeting to cover the floor.

Example: A room is 12 feet 9 inches by 14 feet 6 inches, which I wish to cover with carpet one yard wide.

Solution : $12\frac{3}{4} \times 14\frac{1}{2} = 184\frac{7}{8}$ square feet in the room.

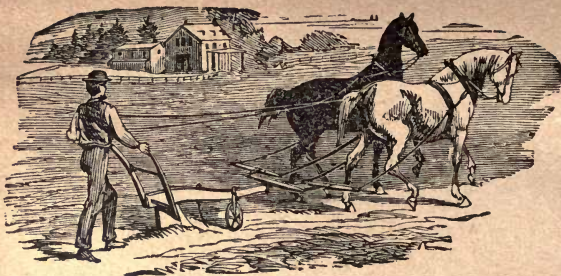
$184\frac{7}{8} \div 9 = 20\frac{1}{2}$ yards, nearly.

Or by inches, 12 ft. and 9 in. = 153 inches.

14 ft. and 6 in. = 174 inches.

$153 \times 174 = 26622$ square inches in the floor.

$26622 \div 1296$ (sq.in.in one yd.) = $20\frac{1}{2}$ yds. nearly.



How to Find the Distance Traveled in Ploughing.

Showing the distance traveled by a horse in ploughing an acre of land, and the quantity of land cultivated per day, computed at the rate of 16 and 18 miles per day of 9 hours :

Breadth of furrow slice.	Space traveled in ploughing an acre.	Extent ploughed per day.		Breadth of furrow slice.	Space traveled in ploughing an acre.	Extent ploughed per day.	
		18 Mi.	16 Mi.			18 Mi.	16 Mi.
7	$14\frac{1}{2}$	$1\frac{1}{4}$	$1\frac{1}{8}$	14	7	$2\frac{1}{2}$	$2\frac{1}{4}$
8	$12\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{4}$	15	$6\frac{1}{2}$	$2\frac{3}{4}$	$2\frac{3}{8}$
9	11	$1\frac{3}{4}$	$1\frac{1}{2}$	16	$6\frac{1}{4}$	$2\frac{9}{10}$	$2\frac{3}{5}$
10	$9\frac{9}{10}$	$1\frac{1}{2}$	$1\frac{3}{8}$	17	$5\frac{3}{4}$	$3\frac{1}{10}$	$2\frac{3}{4}$
11	9	2	$1\frac{3}{4}$	18	$5\frac{1}{2}$	$3\frac{1}{4}$	$2\frac{9}{10}$
12	$8\frac{1}{4}$	$2\frac{1}{5}$	$1\frac{9}{10}$	19	$5\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{1}{10}$
13	$7\frac{1}{2}$	$2\frac{1}{3}$	$2\frac{1}{10}$	20	$4\frac{9}{10}$	$3\frac{1}{5}$	$3\frac{1}{4}$

General Observations.

1. There are 43,560 square feet in an acre.
2. A piece of land 1 foot wide and 43,560 feet long is one acre.
3. 43,560 feet equal $8\frac{1}{4}$ miles.
4. There are a less number of turns in ploughing a long and narrow field than in ploughing a square one containing the same number of acres.
5. It takes less fence per acre to inclose a square field than it does to inclose a long and narrow field containing the same number of acres.



THE LIGHTNING METHOD FOR MEASURING LUMBER.

1. A FOOT OF LUMBER is one foot long, one foot wide and one inch thick.

2. PIECE STUFF OR DIMENSION STUFF is lumber that is two or more inches thick and of uniform width and length.

3. SCANTLING is usually from three to four inches wide and from two to four inches thick.

4. JOIST is 2-inch lumber of any width.

5. PLANK is two inches in thickness and wider than a scantling.

Rule for 12-foot Boards: Find the width of the boards in inches and add together, and the sum obtained will be equal to the number of feet in the pile. (Each inch in width equals one foot of lumber.)

Note: Use no fractions. If a board is between 9 and 10 inches wide, but nearer 9 than 10, call it 9; if nearer 10 than 9, call it 10. If it is $9\frac{1}{2}$, call it either 9 or 10.

For 14-foot Boards add the width of the boards in inches, and to the sum add $\frac{1}{6}$ of itself, and the result will equal the number of feet in the pile.

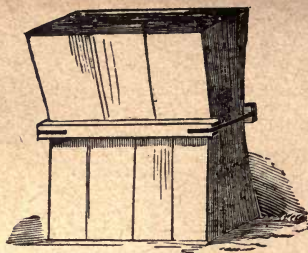
For 16-foot Lumber, add the width of the boards in inches and to that sum add $\frac{1}{8}$ of itself, and you will have the number of feet in the pile.

Example : How many feet of lumber in 10 boards, 9 inches wide, and 16 feet long ?

Solution, $10 \times 9 = 90$.

$\frac{1}{8}$ of $90 = 30$.

$30 + 90 = 120$, the number of feet.



How to Find the Number of Shingles Required for a Roof.

Rule.—Multiply the length of the ridge pole by twice the length on one rafter, and, if the shingles are to be exposed $4\frac{1}{2}$ inches to the weather, multiply by 8, and if exposed 5 inches to the weather, multiply by 7, and you have the number of shingles.

NOTE.—Shingles are 16 inches long, and average about 4 inches wide. They are put up in bundles of 250 each.

How to Find the Number of Laths for a Room.

Laths are 4 feet long and $1\frac{1}{2}$ inches wide, and 16 laths are generally estimated to the square yard.

RULE.—Find the number of square yards in the room and divide by 16, and the result will equal the number of laths necessary to cover the room.

How to Find the Number of Cords in a Pile of Wood.

A cord of wood is a pile 8 feet long, 4 feet wide and 4 feet high and contains 128 cubic feet.

Rule.—Multiply the length in feet by the width in feet and that result by the length in feet and divide the product by 128 and you have the number of cords.

Example: How many cords in a pile of wood 4 feet wide, 7 feet high, 24 feet long?

Solution: $4 \times 7 \times 24 = 672$ cubic feet. $672 \div 128 = 5\frac{1}{4}$ cords. Ans.

The Actual Weight of Dry Pine Lumber.

Timber.....	3 lbs. per ft.	White Pine Flooring.....	1.9 lbs. per ft.
Joists.....	2.8 " " "	Norway Flooring.....	2.3 " " "
Inch Lumber (rough)	2.6 " " "	Shingles.....	250 " M.
Inch " (dressed)	2.3 " " "	Laths	500 " " M.



JOISTS, SCANTLING AND TIMBER MEASUREMENT.

Size in Inches.	Length in Feet.									
	12	14	16	18	20	22	24	26	28	30
2 x 4.....	8	9	11	12	13	15	16	17	19	20
2 x 6.....	12	14	16	18	20	22	24	26	28	30
2 x 8.....	16	19	21	24	27	29	32	35	37	40
2 x 10.....	20	23	27	30	33	37	40	43	47	50
2 x 12.....	24	28	32	36	40	44	48	52	56	60
3 x 4.....	12	14	16	18	20	22	24	26	28	30
3 x 6.....	18	21	24	27	30	33	36	39	42	45
3 x 8.....	24	28	32	36	40	44	48	52	56	60
3 x 10.....	30	35	40	45	50	55	60	65	70	75
3 x 12.....	36	42	48	54	60	66	72	78	84	90
4 x 4.....	16	19	21	24	27	29	32	35	37	40
4 x 6.....	24	28	32	36	40	44	48	52	56	60
4 x 8.....	32	37	43	48	53	59	64	69	75	80
4 x 10.....	40	47	53	60	67	73	80	87	93	100
4 x 12.....	48	56	64	72	80	88	96	104	112	120
6 x 6.....	36	42	48	54	60	66	72	78	84	90
6 x 8.....	48	56	64	72	80	88	96	104	112	120
6 x 10.....	60	70	80	90	100	110	120	130	140	150
6 x 12.....	72	84	96	108	120	136	144	156	168	180
8 x 8.....	64	75	85	96	107	117	128	139	149	160
8 x 10.....	80	93	107	120	133	147	160	173	187	200
8 x 12.....	96	112	128	144	160	176	192	208	224	240
10 x 10.....	100	117	133	150	167	183	200	217	233	250
10 x 12.....	120	140	160	180	200	220	240	260	280	300
12 x 12.....	144	168	192	216	240	264	288	312	336	360
12 x 14.....	168	196	224	252	280	308	336	364	392	420
14 x 14.....	196	229	261	294	327	359	392	425	457	490

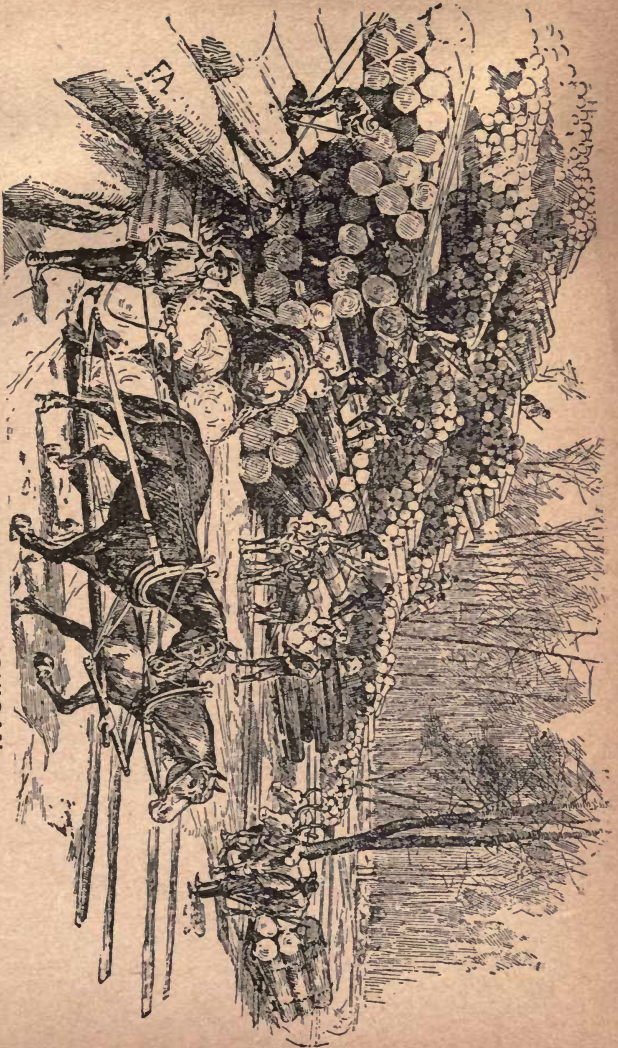
Example: A timber 12 by 14 inches, 18 feet long, contains 252 square feet.

Board and Plank Measurement—At Sight.

This table gives the sq. ft. and inches in Board from 6 to 25 in. wide, and from 8 to 36 ft. long. If a board be longer than 36 ft., unite two numbers. Thus, if a board is 40 ft. long, and 16 in. wide, add 30 and 10 and you have 53 ft. 4 inches. For 2 in. plank double the product.

Feet Long.	6 in.	7 in.	8 in.	9 in.	10 in.	11 in.	12 in.	13 in.	14 in.	15 in.
	w.	w.	w.	w.	w.	w.	w.	w.	w.	w.
	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.	ft.in.
8...	4 0	4 8	5 4	6 0	6 8	7 4	8 0	8 8	9 4	10 0
9...	4 6	5 3	6 0	6 9	7 6	8 3	9 0	9 9	10 6	11 3
10...	5 0	5 10	6 8	7 6	8 4	9 2	10 0	10 10	11 8	12 6
11...	5 6	6 5	7 4	8 3	9 2	10 1	11 0	11 11	12 10	13 9
12...	6 0	7 0	8 0	9 0	10 0	11 0	12 0	13 0	14 0	15 0
13...	6 6	7 7	8 8	9 9	10 10	11 11	13 0	14 1	15 2	16 3
14...	7 0	8 2	9 4	10 6	11 8	12 10	14 0	15 2	16 4	17 6
15...	7 6	8 9	10 0	11 3	12 6	13 9	15 0	16 3	17 6	18 9
16...	8 0	9 4	10 8	12 0	13 4	14 8	16 0	17 4	18 8	20 0
17...	8 6	9 11	11 4	12 9	14 2	15 7	17 0	18 5	19 10	21 3
18...	9 0	10 6	12 0	13 6	15 0	16 6	18 0	19 6	21 0	22 6
19...	9 6	11 1	12 8	14 3	15 10	17 5	19 0	20 7	22 2	23 9
20...	10 0	11 8	13 4	15 0	16 8	18 4	20 0	21 8	23 4	25 0
21...	10 6	12 3	14 0	15 9	17 6	19 3	21 0	22 9	24 6	26 3
22...	11 0	12 10	14 8	16 6	18 4	20 2	22 0	23 10	25 8	27 6
23...	11 6	13 5	15 4	17 3	19 2	21 1	23 0	24 11	26 10	28 9
24...	12 0	14 0	16 0	18 0	20 0	22 0	24 0	26 0	28 0	30 0
25...	12 6	14 7	16 8	18 9	20 10	22 11	25 0	27 1	29 2	31 3
26...	13 0	15 2	17 4	19 6	21 8	23 10	26 0	28 2	30 4	32 6
27...	13 6	15 9	18 0	20 3	22 6	24 9	27 0	29 3	31 6	33 9
28...	14 0	16 4	18 8	21 0	23 4	25 8	28 0	30 4	32 8	35 0
29...	14 6	16 11	19 4	21 9	24 2	26 7	29 0	31 5	33 10	36 3
30...	15 0	17 6	20 0	22 6	25 0	27 6	30 0	32 6	35 0	37 6
31...	15 6	18 1	20 8	23 3	25 10	28 5	31 0	33 7	36 2	38 9
32...	16 0	18 8	21 4	24 0	26 8	29 4	32 0	34 8	37 4	40 0
33...	16 6	19 3	22 0	24 9	27 6	30 3	33 0	35 9	38 6	41 3
34...	17 0	19 10	22 8	25 6	28 4	31 2	34 0	36 10	39 8	42 6
35...	17 6	20 5	23 4	26 3	29 2	32 1	35 0	37 11	40 10	43 9
36...	18 0	21 0	24 0	27 0	30 0	33 0	36 0	39 0	42 0	45 0

	16 in.	17 in.	18 in.	19 in.	20 in.	21 in.	22 in.	23 in.	24 in.	25 in.
8...	10 8	11 4	12 0	12 8	13 4	14 0	14 8	15 4	16 0	16 8
9...	12 0	12 9	13 6	14 3	15 0	15 9	16 6	17 3	18 0	18 9
10...	13 4	14 2	15 0	15 10	16 8	17 6	18 4	19 2	20 0	20 10
11...	14 8	15 7	16 6	17 5	18 4	19 3	20 2	21 1	22 0	22 11
12...	16 0	17 0	18 0	19 0	20 0	21 0	22 0	23 0	24 0	25 0
13...	17 4	18 5	19 6	20 7	21 8	22 9	23 10	24 11	26 0	27 1
14...	18 8	19 10	21 0	22 2	23 4	24 6	25 8	26 10	28 0	29 2
15...	20 0	21 3	22 6	23 9	25 0	26 3	27 6	28 9	30 0	31 3
16...	21 4	22 8	24 0	25 4	26 8	28 0	29 4	30 8	32 0	33 4
17...	22 8	24 1	25 6	26 11	28 4	29 9	31 2	32 7	34 0	35 5
18...	24 0	25 6	27 0	28 6	30 0	31 6	33 0	34 6	36 0	37 6
19...	25 4	26 11	28 6	30 1	31 8	33 3	34 10	36 5	38 0	39 7
20...	26 8	28 4	30 0	31 8	33 4	35 0	36 8	38 4	40 0	41 8
21...	28 0	29 9	31 6	33 3	35 0	36 9	38 6	40 3	42 0	43 9
22...	29 4	31 2	33 0	34 10	36 8	38 6	40 4	42 2	44 0	45 10
23...	30 8	32 7	34 6	36 5	38 4	40 3	42 2	44 1	46 0	47 11
24...	33 0	34 0	36 0	38 0	40 0	42 0	44 0	46 4	48 0	50 0
25...	34 4	35 5	37 6	39 7	41 8	43 9	45 10	47 11	50 0	52 1
26...	35 8	36 10	39 0	41 2	43 4	45 6	47 8	49 10	52 0	54 2
27...	36 0	38 3	40 6	42 9	45 0	47 3	49 6	51 9	54 0	56 3
28...	37 4	39 8	42 0	44 4	46 8	49 0	51 4	53 8	56 0	58 4
29...	38 8	41 1	43 6	45 11	48 4	50 9	53 2	55 7	58 0	60 5
30...	40 0	42 6	45 0	47 6	50 0	51 6	55 0	57 6	60 0	62 6



LUMBERING IN NORTHERN MICHIGAN.

HOW TO REDUCE LOGS TO INCH BOARD MEASURE.

L. Feet.	Diam. 12	Diam. 13	Diam. 14	Diam. 15	Diam. 16	Diam. 17	Diam. 18	Diam. 19	Diam. 20	Diam. 21	Diam. 22	Diam. 23	Diam. 24	Diam. 25	Diam. 26	Diam. 27	Diam. 28
10	49	61	72	89	99	116	133	150	175	190	209	235	252	287	313	342	363
11	54	67	79	98	109	127	147	165	192	209	230	259	278	315	344	377	400
12	59	73	86	107	119	139	160	180	210	228	251	283	303	344	373	411	436
13	64	79	93	116	129	150	173	195	227	247	272	306	328	378	408	445	473
14	69	85	100	125	139	162	187	210	245	266	292	330	353	401	439	479	509
15	64	91	107	134	149	173	200	225	262	285	313	353	379	430	469	514	545
16	79	97	114	142	159	185	213	240	280	304	334	377	404	459	500	548	582
17	83	103	122	151	168	196	227	255	297	323	355	400	429	478	531	582	618
18	88	109	129	160	178	208	240	270	315	342	376	424	454	516	562	616	654
19	93	116	136	169	188	219	253	285	332	361	397	447	480	545	594	650	692
20	98	122	143	178	198	232	267	300	350	380	418	470	505	573	625	684	728
21	103	128	150	187	208	243	280	315	368	399	439	495	530	602	656	719	764
22	108	134	157	196	218	255	293	330	385	418	460	518	555	631	688	753	800
23	113	140	164	205	228	266	307	345	403	437	480	542	581	659	719	787	837
24	118	146	172	214	238	278	320	360	420	456	501	566	606	688	750	821	873
25	123	152	179	223	248	289	333	375	438	475	522	589	631	717	781	850	910

L. Feet.	Diam. 29	Diam. 30	Diam. 31	Diam. 32	Diam. 33	Diam. 34	Diam. 35	Diam. 36	Diam. 37	Diam. 38	Diam. 39	Diam. 40	Diam. 41	Diam. 42	Diam. 43
10	381	411	408	460	490	500	547	577	644	667	700	752	795	840	872
11	419	451	448	506	569	550	602	634	718	734	770	828	874	924	959
12	457	493	532	552	588	600	657	692	772	801	840	903	954	1007	1046
13	495	534	570	598	637	650	712	750	836	868	910	978	1033	1091	1134
14	533	575	622	644	686	700	766	807	901	934	980	1053	1113	1175	1221
15	571	616	666	690	735	750	821	865	965	1001	1050	1129	1192	1269	1309
16	609	657	710	736	784	800	876	923	1029	1068	1120	1204	1272	1343	1396
17	647	698	756	782	833	850	930	980	1094	1134	1190	1279	1351	1427	1483
18	685	739	799	828	882	900	985	1038	1158	1201	1260	1354	1431	1511	1570
19	723	780	843	874	931	950	1040	1096	1222	1268	1330	1430	1510	1595	1658
20	761	821	888	920	980	1000	1095	1152	1287	1335	1400	1505	1590	1679	1745
21	800	863	932	966	1027	1050	1150	1210	1351	1401	1470	1580	1669	1763	1832
22	838	904	976	1012	1078	1100	1204	1268	1426	1468	1540	1656	1749	1847	1919
23	876	945	1021	1058	1127	1150	1259	1322	1490	1535	1610	1731	1828	1931	2006
24	914	986	1065	1104	1176	1200	1314	1380	1545	1602	1680	1806	1908	2015	2094
25	952	1027	1109	1150	1225	1250	1369	1438	1609	1668	1750	1881	1987	2099	2182

HOW TO USE THE LOG TABLE.

First find the average diameter of the log by adding together the two ends of the log, in inches; then divide by two and the result will equal the average diameter, and then apply the above table.

Example.—How many feet of lumber is there in a log 15 inches at one end and 21 inches at the other, and 22 feet long?

Solution.— $15 + 21 = 36$ one half of $36 = 18$ inches the average diameter.

Then refer to the column under 18 inches opposite of 22 and you will find the answer—293 feet.



How to Ascertain the Number of Feet (Board Measure) in a Log.

Rule: Subtract from the diameter of the log in inches, 4 inches (for slabs), one-fourth of this result squared and multiplied by the length in feet, will give the correct amount of lumber made from any log.

Example:—How many feet of lumber can be made from a log which is 36 inches in diameter and 10 feet long?

Solution:—From 36 (diameter) subtract 4 (for slabs)=32. Take $\frac{1}{4}$ of 32 =8, which multiplied by itself equals 64. Then multiply 64 by 10 (length) =640. Ans.

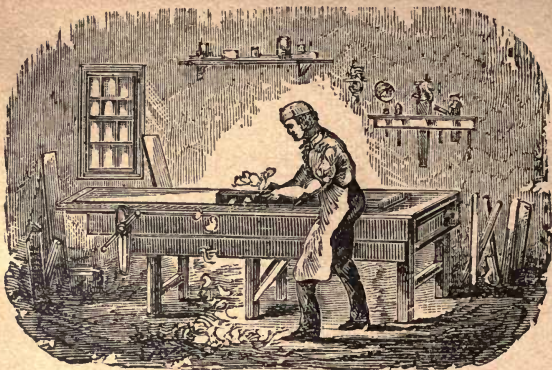
ROPP'S RULE: Square the diameter in inches and subtract 60 from the result, then multiply this result by the length and divide by 2, and cut off the right hand figure.

How to Reduce Logs to Square Timber.

Rule: Multiply the square of the diameter in inches by the length of the log in feet and divide the result by 300, and the result will equal the number of cubic feet.

Example: How many cubic feet in a log 30 inches in diameter and 20 feet long?

Solution: $30 \times 30 \times 20 \div 300$ —Ans. 60 cubic feet.



A COMPLETE SET OF CARPENTER'S RULES.

PLAIN, SIMPLE AND PRACTICAL.

1. THE GABLE is a space the form of a triangle on the end of a building, with a common double roof.
2. QUARTER PITCH.—Is a roof that is one-fourth as high as the width of the building.



Rule.—To find the area of the gable end, multiply the width of the building by the height of the roof, and take one-half of the result. Or, if the roof is "quarter pitch," find the area by multiplying the width of the roof by $\frac{1}{2}$ of itself.

3. To find the number of feet of stock boards to cover a house or barn.

Rule.—Multiply the distance around the barn by the height of the posts, and to this result add the area of the two gable ends. (If there are many openings, allowance should be made for them).

4. SHINGLES.—There are 250 shingles in a bunch.

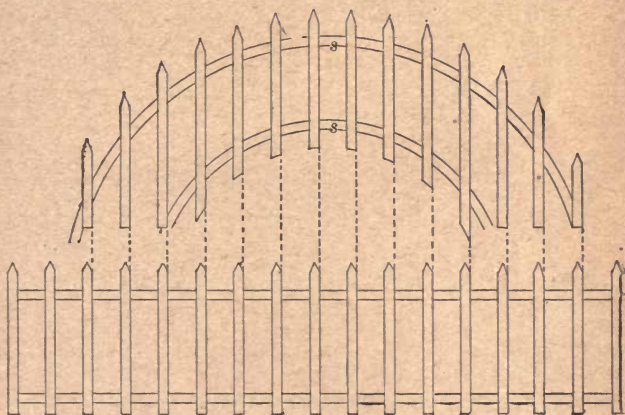
Rule.—One thousand shingles, laid 4 inches to the weather, will cover 100 square feet, and 900 shingles laid $4\frac{1}{2}$ inches to the weather, will cover 100 square feet.

5. FLOORS AND SIDING.—To find the number of feet of six-inch *matched flooring* for a given floor. Find the number of square feet of surface to be covered, and add $\frac{1}{2}$ of itself to it, and the result will be the required number of feet.

6. FOR 3-INCH FLOORING. Find the number of square feet to be covered, to which add $\frac{1}{3}$ of itself.

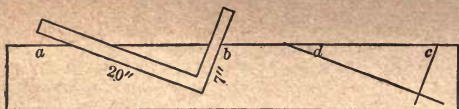
7. LATH—50 in a bunch.

Contractor's Rule.—One bunch of lath will cover 3 square yards.



Does it Take More Pickets to Build Over a Hill than on a Level?

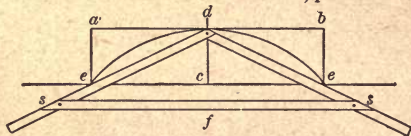
Many arguments and discussions have taken place over this simple problem. It takes no more pickets to build over a hill than on a level. You can see from the above figure, that the number of pickets are the same by actual count. The curve-lines represent the hill, and the lower lines the level ground. The dotted lines join the two, and they make the same fence over the hill, and are no farther apart than on the level.



How to Find the Length and Bevels of Rafters.

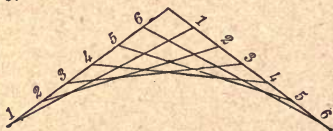
1. Place your steel square on a board (say the building is 40 feet long) 20 inches from the corner one way, and seven inches the other, and mark it as shown in the above figure. Now the angle at C. will be the bevel of the upper end, and the angle at d, the bevel at the lower end of the rafter.

2. LENGTH OF RAFTER.—The length will be from a to b on the outer edge of the board. The 20 inches shows the 20 feet or half of the width of the building, the 7 inches the seven foot rise. Now the distance from a to b , on the edge of the board, is 21 inches, two-twelfths and one-quarter of a twelfth, (always use a square with inches on one side divided into twelfths) therefore this rafter will be 21 feet and $2\frac{1}{4}$ inches long.



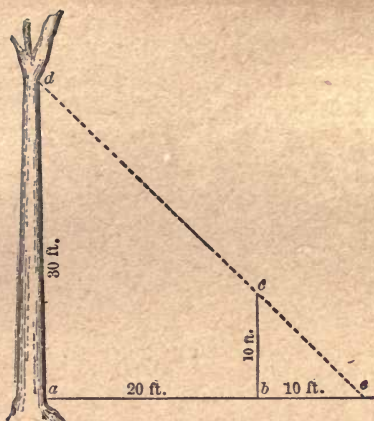
How to Make a Curve with a Set Triangle.

1. In the above figure let a, b , represent the length, and c, d , the height of the curve. Drive two awls at e and e ; then take two strips, marked $s.s.$, and nail them together at the point d , and spread out the sides to the awls at e and e . Then tack on the brace f , hold a pencil at the point d , then move the point towards the point e both ways, be sure and keep the strips $s.s.$ hard against the awls at e and e , and the pencil will mark out the exact curve.



How to Make the Curves for Brick and Stone Arches.

Measure the width, and draw the figure as above. If the points in 1, 2, 3, 4, etc., are equal on both sides, the curve will be an exact part of a circle.



How to Find the Height of a Tree.

Suppose you desire a log 30 ft. long, measure off from the base of the tree 30 ft. (allow for the height of the stump), then measure ten feet back, and put your ten-foot pole at *b*, let some one hold it the height of the stump from the ground, then put your eye at *e*, looking over the top of the pole at *c*, and where the eye strikes the tree at *d*, will be 30 feet from *a*.

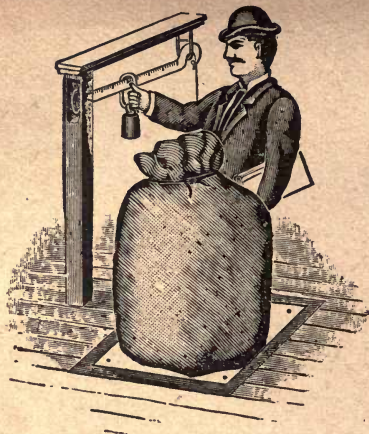
N.B.—This rule will apply to any tree, or any height. The principles hold true in any case.

How to Find the Height by Measuring the Shadow.

RULE.—Measure a pole, and hold it perpendicular in the sun, and measure its shadow, then measure the shadow of the tree whose height is desired. Then multiply the length of the pole by the length of the tree's shadow, and divide the product by the length of the shadow of the pole, and the result will be the height of the tree.

Example:—If a pole 3 feet long casts a shadow $4\frac{1}{2}$ feet long, what is the height of a tree whose shadow measures 180 feet?

Solution:— $180 \times 3 \div 4\frac{1}{2} = 120$ feet, the height of the tree.



How to Determine Results by Cancellation.

1. Cancellation is the method of shortening operations by rejecting equal factors from numbers used as a divisor and the numbers used as a dividend.

2. Cancellation shortens the process of multiplication and division and is very practical in the following list of examples.

ILLUSTRATION: Multiply $18 \times 16 \times 28$ and divide the result by $12 \times 7 \times 14$, and it will equal $6\frac{2}{7}$.

SOLUTION.

$$\begin{array}{r} \overset{3}{\cancel{18}} \times \overset{2}{\cancel{16}} \times \overset{2}{\cancel{28}} \\ \hline \cancel{12}_2 \times \cancel{7} \times \cancel{14} \end{array} = \frac{3 \times 16}{7} = 6\frac{2}{7}, \text{ Ans.}$$

$$\begin{array}{r} \text{Or, } \overset{2}{\cancel{12}} \overset{3}{\cancel{18}} \overset{2}{\cancel{28}} \\ \hline \overset{2}{\cancel{12}} \overset{2}{\cancel{16}} \overset{2}{\cancel{28}} \\ \hline 7 \mid 48 = 6\frac{2}{7}, \text{ Ans.} \end{array}$$

How to Estimate all Kinds of Produce, and Figure Up Wheat, Oats, Potatoes, Etc., Sold by the Bushel.

Cancellation Method.

EXAMPLE: What will 1660 pounds of wheat cost at 80 cents a bushel?

SOLUTION :

$$\begin{array}{r|l} \cancel{30} & 1660 \\ & .80 \\ \hline & .4 \end{array}$$

$$3 \mid 66.40 = \$22.13\frac{1}{3}. \text{ Ans.}$$

EXPLANATION: It will be seen at a glance that the number of pounds and the price are to be multiplied together and the result divided by 60; so place 1660 and 80 on one side of the line and 60 on the other and determine the result by cancellation as shown in the above. This principle will apply to any commodity and is one of the best and most rapid methods in solving practical examples.

EXAMPLE: What will 2840 pounds of corn cost at 36 cents per bushel?

SOLUTION :

$$\begin{array}{r|l} \cancel{70} & 2840 \\ & .36 \\ \hline & \end{array}$$

$$7 \mid 102.24 = \$14.60\frac{4}{7}. \text{ Ans.}$$



How to Figure Lumber by Cancellation.

RULE: Lumber is measured by the running foot. A foot square and one inch thick is the unit of measurement. It is easily seen that the number of pieces of lumber, multiplied by the length and that result multiplied by the cost, and the total result divided by 12, will determine the cost of any quantity of lumber that may be desired.

EXAMPLE: How many feet in a stick of lumber 6 x 8 and 18 feet long?

SOLUTION:

$$\begin{array}{r|l} \cancel{12} & \cancel{6} \\ \cancel{2} & 8 \\ \hline & \cancel{18}^9 \end{array}$$

72 feet, *Ans.*

EXAMPLE: What will be the cost of 10 planks 14 inches wide, 2 inches thick, 14 feet long, at \$12 per thousand?

SOLUTION:

$$\begin{array}{r|l} & \cancel{14}^7 \\ 3 & \cancel{2} \\ \cancel{6} & 14 \\ \cancel{12} & 10 \\ \hline & 20 \end{array}$$

3 | 196.00 = \$6.53 $\frac{1}{3}$. *Ans.*

EXAMPLE: What will be the cost of 20 pieces 2 x 4, 18 feet long, at \$12 per thousand?

SOLUTION:

$$\begin{array}{r|l} & 2 \\ & 4 \\ \cancel{12} & 18 \\ & 20 \\ \hline & \cancel{12} \end{array}$$

| \$28.80. *Ans.*

How to Figure Up the Plastering of a Room by Cancellation.

RULE: Multiply the distance around the room in feet by the height of the room in feet and this result by the price per square yard, and divide the product by 9, because there are 9 square feet in a square yard. For the ceiling multiply the length of the room by the width of the room in feet and this by the price per square yard, and divide the product by 9. Add the two results and you have the cost of plastering the room.

EXAMPLE: What would it cost to plaster a room 18 feet wide, 22 feet long, and 9 feet high, at 20 cents per square yard?

SOLUTION:

$$\begin{array}{r|l} \cancel{8} & 80 \\ \cancel{9} & \cancel{18}^2 \\ \hline & 22 \\ & 20 \end{array}$$

\$16.00 + \$8.80 = \$24.80. *Ans.*



SHORT RULES OF ARITHMETIC.

In these short rules, which we have developed and compiled, our aim has been to make them superior to anything that has ever been published. We have endeavored to teach the how, and not the why. Our object is brevity and completeness. Business demands brief and practical rules. To every farmer, teacher, mechanic, merchant, lawyer and laborer, these rules will prove available and valuable knowledge.

How to Multiply by Eleven.

To multiply any two figures by 11, add two figures together and place their sum between the two figures of that number.

Example : $43 \times 11 = 473$, or 4, (4+3,) and 3. If the sum of the two figures exceed 9, the left-hand figure must be increased by 1. Thus $48 \times 11 = 528$.

Lightning Method of Multiplication and Division.

To multiply by 125, divide by 8, and call it thousands, because 125 is $\frac{1}{8}$ of a thousand.

To multiply by $12\frac{1}{2}$, divide by 8 ; call it hundreds.

To multiply by $1\frac{1}{4}$, divide by 8 ; call it tens.

To multiply by $62\frac{1}{2}$, divide by 16, and call it thousands.

To multiply by $6\frac{1}{4}$, divide by 16, and call it hundreds.

To multiply by $31\frac{1}{4}$, divide by 32, and call it thousands

To multiply by $333\frac{1}{3}$, divide by 3, and call it thousands.

To multiply by $33\frac{1}{3}$, divide by 3, and call it hundreds.

To multiply by $3\frac{1}{3}$, divide by 3, and call it tens.

To multiply by 50, divide by 2, and call it hundreds.

To multiply by $66\frac{2}{3}$, divide by 15, and call it thousands.

To multiply by $833\frac{1}{3}$, divide by 15, and call it ten thousands, by annexing four ciphers.

To multiply by $83\frac{1}{3}$, divide by 12, and call it thousands.

To multiply by $8\frac{1}{3}$, divide by 12, and call it hundreds, because $8\frac{1}{3}$ is $\frac{1}{12}$ of a hundred. The reason is similar in each case.

To multiply by $166\frac{2}{3}$, divide by 6, and call it thousands.

To multiply by $16\frac{2}{3}$, divide by 6, and call it hundreds.

To multiply by $1\frac{2}{3}$, divide by 6, and call it tens.

To multiply by $37\frac{1}{2}$, take $\frac{3}{8}$ of the number, and call it hundreds; $87\frac{1}{2}$, $\frac{7}{8}$ of the number, and call it hundreds, etc.

We simply reverse these methods to divide. To divide by 10, 100, 1,000, etc., we remove the point one, two and three places to the left.

To divide by 25, remove the decimal point two places to the left, and multiply by 4.

Removing the point two places divides by one hundred; hence the quotient is 4 times too small; hence we remove the point two places, and multiply by 4.

To divide by $2\frac{1}{2}$, remove the point one place to the left, and multiply by 4.

To divide by 125, remove the point three places to the left, and multiply by 8.

To divide by $12\frac{1}{2}$, remove the point two places to the left, and multiply by 8.

To divide by $1\frac{1}{4}$, remove the point one point to the left, and multiply by 8. There are about $1\frac{1}{4}$ cubic feet in one bushel. Hence dividing the number of cubic feet by $1\frac{1}{4}$ gives the number of bushels nearly.

To divide by $133\frac{1}{3}$, remove the point three places to the left, and multiply by 3.

To divide by $8\frac{1}{3}$, remove the point two places to the left, and multiply by 12.

SHORT METHODS OF MULTIPLICATION.

To multiply any two figures by 11, add two figures together and place their sum between the two figures of that number. Example: $43 \times 11 = 473$, or 4, (4+3), and 3. If the sum of the two figures exceed 9, the left-hand figure must be increased by 1. Thus $48 \times 11 = 528$.

To divide any number by 5, multiply by 2 and cut off the right-hand figure. Example: $488 \div 5 = 488 \times 2 = 976$.

To divide any number by 25, multiply by 4 and cut off the two right-hand figures. Example: $324 \div 25 = 324 \times 4 = 1296$.

To divide any number by 125, multiply by 8 and cut off three figures from the right. Example: $6250 \div 125 = 6250 \times 8 = 50000$.

To multiply numbers of tens and units when tens or units are alike, multiply the units together, and if alike multiply the sum of the tens by the units and then the tens by the tens.

$$\begin{array}{r} \text{Example: } 64 \quad 4 \times 4 = 16 \quad \text{carried} \\ 34 = 6 + 3 = 9 \times 4 = 36 + 1 = 37 \\ \hline \text{carried} \\ 2176 \quad 3 \times 6 = 18 + 3 = 21 \end{array}$$

TO MULTIPLY BY 9's.

To multiply by 9, 99, or any number of 9's, annex as many ciphers to the multiplicand as there are 9's in the multiplier, and from the result subtract the multiplicand.

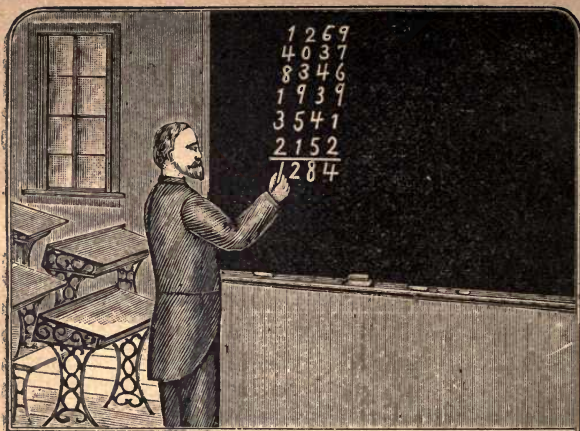
Example: Multiply 1,736 by 999 = 2,736,000

$$\begin{array}{r} 2,736 \\ \hline 2,733,264 \text{ Ans.} \end{array}$$

Weight and Value of Gold and Silver.

A ton of pure gold is valued at \$602,799.21. The weight of a million dollars in gold coin is 3,685.8 pounds.

A ton of pure silver is valued at \$37,704.84. The weight of a million dollars in silver coin is 58,929.9 pounds.



AN EASY WAY TO ADD.

This is a very simple and easy method, and will be a great help to those who find difficulty in adding long columns of figures correctly :

47

EXAMPLE :

7

6

36

4

9

47

7

6

48

8

6

38

4

2

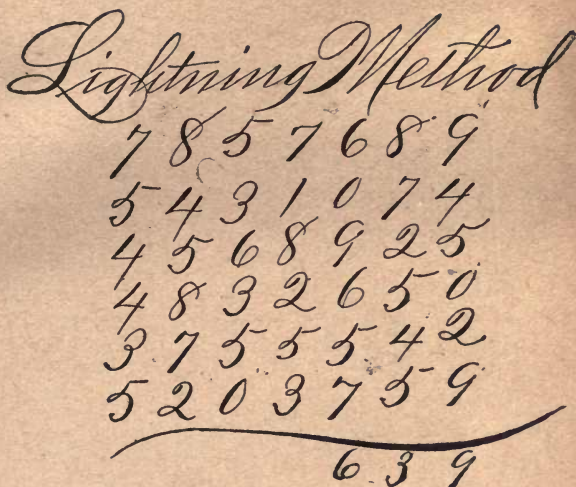
9

36

Process.—Begin at 9 to add as near 20 as you can, thus: $9 + 2 + 4 + 3 = 18$, reject the tens and place the 8 to the right of the 3, as in example; begin at 6 and add $6 + 8 + 4 = 18$, reject the tens, as before, and place 8 to the right of 4, as in example; begin at 6 + 7 + 4 = 17, reject tens, place 7 to the right of 4, as in example; then $9 + 4 + 3 = 16$, reject tens, place 6 to the right of 3; then $6 + 7 + 4 = 17$, reject tens, and place 7 to the right, as before; having arrived at the top of the column, add the figures in the new column, thus: $8 + 8 + 7 + 6 + 7 = 36$, or 3 tens and 6 units; place the 6 units as the unit's figure of the sum, having 3 tens to carry to 5 tens, the number of integers or catch figures already rejected. $3 + 5 = 8$ tens, which pre-fixed with the 6, makes 86 the sum.

N. B.—Two or more columns may be added in the same way by using a lead pencil, and then erasing the figures used after the addition is completed.

ADDITION.



"Lightning addition" lies in the ability to see and take in the result of two or more figures without stopping to add each figure separately, i. e., to read results in figures as in reading a book, the meaning of the word or sentence is known without spelling out each syllable or word.

Process: Commence at the bottom at the right and add thus in the above example: 11, 18, 29; then carry the 2 tens to the second column; then add, 7, 16, 25, 33; carry the 3 hundreds to the third column and add the same way; 10, 21, 30, 36, etc., etc.

Never allow yourself to add up a column in this manner: 9 and 2 are 11 and 5 are 16 and 4 are 20 and 9 are 29. It is just as easy to name the results of two or more figures at once, and five times as rapid.

Practice adding columns of figures fifteen minutes each day for six months, and you will become an expert in addition.

The Civil Service Method of Addition.

This method may be new
to some, but it should be
understood by all.

\$ 2492.27	
9636.85	24
3254.36	24
8927.05	25
1622.31	27
400.10	34
4321.70	32
<u>5043.00</u>	<u>\$ 35697.64</u>

Commence at the right and add each column of figures by itself, as for instance the first column equals 24; put down the 24; the next column equals 24; put it down as above; the next column equals 25, the next 27, and so on, and then add the results as shown in the above form.

The advantage of this method is that a persons attention may be called to other things, while he is in the midst of his results, and not loose any time or suffer any disadvantage. In the countinghouse or places of business where there is a great deal of talking and many other things call the clerk, when he left off he is never at a loss to resume his work.

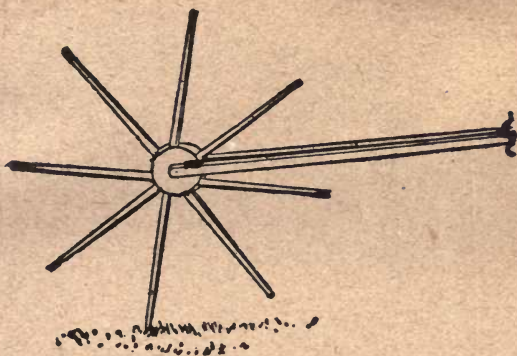


FIG. 2.

RAPID FIELD MEASURING.

1. The above machine Fig. 2. is used for rapid measuring of fields. Every farmer should know the number of acres in each field, and this can be readily ascertained by the little simple contrivance. It is much better than a surveyors chain or tape line, because it can be used by one person.

2. It is made by taking a small hub and putting in spokes a little larger than a lath, or even a lath may be used, and make them of such size that one revolution measures exactly one rod or $16\frac{1}{2}$ feet; this is done by having each spoke $32\frac{1}{2}$ inches in length. The hub is made of two circular pieces of inch board screwed face to face together, holding the spokes firmly in the grooves previously cut. There should be eight spaces between the points as there are eight spokes, and at the end they should be just $24\frac{3}{4}$ inches apart.

3. The points on the wheel should not be very sharp, because they would sink into soft ground and the distance would not be accurate.

4. Tie a white string on one of the spokes, or paint a spoke red or some other color, or mark it in any way so that it can be easily counted every time it comes round, and with this simple contrivance any field may be measured in a very short time by a single person.



FIG 5.

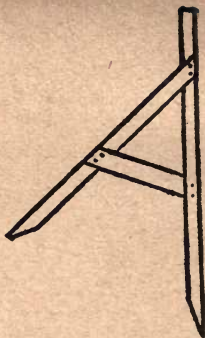


FIG. 9.

1. Figure No. 5 in the above illustration represents a simple contrivance for laying off a field at right angles.

2. Determine one line either by the sun or some other object and then sight along the square in that direction, and then sight along the other side, and you have a right angle or the corner of a field in the form of a right angle.

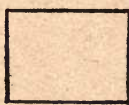
3. Figure No. 9. represents a simple contrivance for laying off drills or hills for a garden or field. If you desire to be correct in making garden you measure the distance you desire to have the rows apart and then take a couple of laths and make the contrivance illustrated in figure 9, and you will find it very convenient. The rows will always be straight and parallel.



Square.



Rhombus.



Rectangle.



Rhomboid.

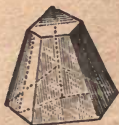
Short Cuts in Mensuration.

To find the area of a rectangle:—Multiply the length by the breadth.

To find the contents of an irregular body:—Immerse the body in a vessel full of water, and measure the quantity of water displaced.



Pyramid.



Frustum.



Cone.



Frustum.

To find the solid contents of a pyramid or cone :—Multiply the area of the base by $\frac{1}{3}$ the height.

To find the solid contents of a frustum :—Find the area of the base and top; add together and divide by two, then take this result and multiply it by the height of the frustum and the result will equal the solid contents.



Triangular Prism.



Quadrangular Prism.

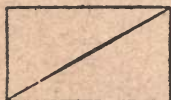


Pentagonal Prism.

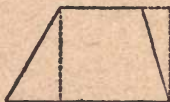


Cylinder.

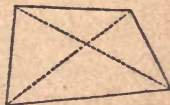
To find the area of a triangle :—Multiply the base by one-half the altitude. Or :—From half the sum of the three sides subtract each side separately ; multiply together the half sum and the three remainders, and extract the square root of the product.



Parallelogram.



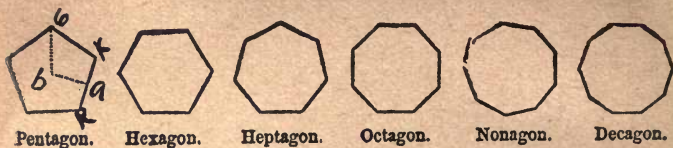
Trapezoid.



Trapezium.

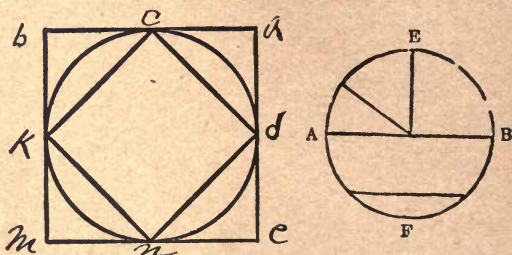
To find the area of a trapezoid, or rhomboid, or rhombus :—Add the two parallel sides together, multiply by the height and divide the result by 2.

To find the area of a trapezium :—Divide the trapezium in triangles and find the area according to previous rules in this book.



To Find the Area of Any of the Above Figures.

Find the center of the figure and multiply distance around the figure (perimeter) by one half of the diameter and the result will equal the area.



The square described within the above circle is exactly half as large as the square described outside of the circle, that is the inscribed one is half the area of the circumscribed square.

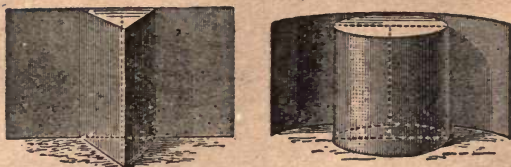
The square $c d n k$ contains exactly one-half the area of the square $a c m b$.

It is thus easily seen that the area of the circumscribed square—that is the square $a c m b$ is equal to the square of the diameter of the circle.

*To find the diameter of a circle:—*Divide the circumference by 3.14156; or multiply it by .318309; or for rough estimates or approximate results, divide the circumference of the circle by 3.

*To find the circumference of a circle:—*Multiply the diameter by 3.14156. For approximate results, multiply the diameter by 3.

*To find the area of a circle:—*Multiply half the diameter by half the circumference. *Or:—*Multiply the square of the diameter by .785398. For approximate results, multiply the square of the diameter by 8, and cut off the right hand figure.

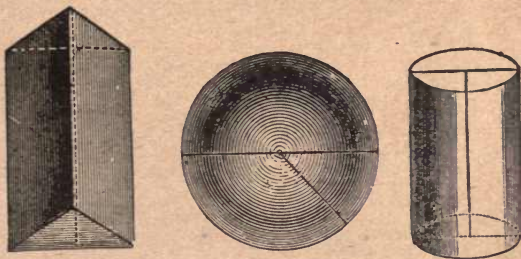


ILLUSTRATING SURFACE.

*To find the side surface of a prism or cylinder:—*Multiply the distance around the base by the height. (To find the entire surface the area of the base and top must be added to the surface of the sides.)

*To find the contents of a prism or cylinder:—*Multiply the area of the base by the height,

*To find the surface of a regular pyramid or cone:—*Multiply the distance around the base by one-half the height. (And to find the entire surface add the area of the base to the surface already found.)



*To find the contents of a cube:—*Multiply three sides together.

*To find the surface of a cube:—*Multiply the square of the length of one of the sides by 6.

*To find the surface of a sphere:—*Multiply the diameter by the circumference.

*To find the solidity of a sphere:—*Multiply the square of the diameter to 3.1416. Or:—Multiply the cube of the diameter by .5236.

*To find the solidity of a cylinder:—*Multiply the area of one end by the length.



The Dark Colored States are those which have adopted the Australian System of Voting.

THE AUSTRALIAN SYSTEM OF VOTING.

There has long been a popular demand among the people for a better system of intelligent voting, and the desire that new safe-guards be thrown about the ballot-box for the protection of the voter. Absolute secrecy has been to a great extent realized in the last few years in the Australian System of Voting. The above illustration shows the number of States which have adopted the system.

There are *two* ways of grouping the names of candidates on the tickets. The first is known as the original Australian style, and contains the alphabetical arrangement of the names under the title of the office. This is used by the following states: California, Kentucky, Massachusetts, Minnesota, Montana, Nebraska, New Hampshire, Oregon, Rhode Island, Tennessee, Vermont, Washington and Wyoming.

The second method is known as the Belgian system, and consists of grouping the nominations and offices by parties. This is used in Missouri, Ohio, Wisconsin, Delaware, Illinois, Indiana, Maine and Oklahoma Territory.



IT MAKES THE SPARKS FLY.

THE NEW ELECTION LAWS.

The whole number of laws enacted is 33; of which one was enacted in 1888, 9 in 1889, 18 in 1891. In this enumeration Michigan and Minnesota are counted twice, because each has passed two laws.

The number of "good" laws is 26, of "poor" laws 3, of "bad" laws 2, of "fair" laws 1.

The number of laws with the blanket ballot is 30, with the alphabetical order 19, with party group and name 5, with party group, name, and emblem 6; the number with separate party ballots is 3.

THE AUSTRALIAN BALLOT.

SECRET BALLOT IN THIRTY-THREE STATES.

Date enacted	State.	Style of Ballot.	Method of Voting.
1891	Arkansas	Blanket, with alphabetical order.	Erasing names not voted for.
1891	California.....	Two blanket ballots, one general, one municipal, with alphabetical order. All party names grouped at top.	Marking each name or simply party name at top.
1891	Colorado.....	Blanket, with party group, name, and emblem.	Marking each name or a group.
1889	Connecticut.....	Unofficial, separate party ballots,	By ballot in official envelopes.

Date enacted	State.	Style of Ballot.	Method of Voting.
1891	Delaware.....	Blanket, with party group, name, and emblem.	Marking each name or a group.
1891	Illinois.....	Blanket, with party group and name.	Marking each name or a group.
1889	Indiana.....	Blanket, with party group, name, and emblem.	Marking each name or a group.
1891	Kentucky.....	Probably blanket, with alphabetical order.	Marking each name.
1891	Maine.....	Blanket, with party group and name.	Marking each name or a group.
1890	Maryland.....	Blanket, with party group, name, and emblem.	Marking each name or a group.
1888	Massachusetts.....	Blanket, with alphabetical order.	Marking each name.
1889-91	Michigan.....	Blanket, with party group, name, and emblem.	Marking each name or a group.
1889-91	Minnesota.....	Three separate blanket ballots, in varied colors, with alphabetical order.	Marking each name.
1890	Mississippi.....	Blanket, with order unspecified.	Marking each name.
1889	Missouri.....	Blanket, with party group and name.	Erasing names not voted for.
1889	Montana.....	Blanket, with alphabetical order.	Marking each name.
1891	Nebraska.....	Blanket, with alphabetical order.	Marking each name.
1891	New Hampshire..	Blanket, with alphabetical order.	Marking each name.
1890	New Jersey.....	Separate party official ballots, obtainable in and out of polling places.	By ballot in envelopes.
1890	New York.....	Separate party official ballots and "paster" ballot.	By ballot.
1891	North Dakota.....	Blanket, with alphabetical order. All party names grouped at top.	Marking each name or simply party name at top.
1891	Ohio.....	Blanket, with party group and emblem.	Marking each name or a group.
1891	Oregon.....	Blanket, with alphabetical order.	Marking each name.
1891	Pennsylvania.....	Blanket, with group and name for regular party nominations, alphabetical order for all others.	Marking each name or a group.
1889	Rhode Island.....	Blanket, with alphabetical order.	Marking each name.
1891	South Dakota.....	Blanket, with alphabetical order.	Marking each name.
1889	Tennessee.....	Blanket, with alphabetical order.	Marking each name.
1891	Texas.....	Probably blanket, with alphabetical order.	Marking each name.
1890	Vermont.....	Blanket, with alphabetical order.	Marking each name.
1890	Washington.....	Blanket, with alphabetical order.	Marking each name.
1891	West Virginia.....	Blanket, with party group and name.	Erasing names not voted for.
1889	Wisconsin.....	Blanket, with alphabetical order.	Marking each name.
1890	Wyoming.....	Blanket, with alphabetical order.	Marking each name.



THE POPULATION OF THE PRINCIPAL CITIES OF THE UNITED STATES.

THE CENSUS OF 1890, 1880 AND 1870 OF EVERY CITY HAVING A POPULATION OF 9,000 OR MORE.

CITIES	1890	1880	1870
Adams, Mass.....	9,206	5,591	12,090
Adrian, Mich.....	9,239	7,849	8,438
Akron, O.....	27,702	16,512	10,006
Albany, N. Y.....	94,640	90,758	69,422
Alexandria, Va.....	14,318	13,659	13,570
Allegheny, Pa.....	104,967	78,682	53,180
Allentown, Pa.....	25,183	18,063	13,884
Alpena, Mich.....	11,228	6,153	2,612
Alton, Ill.....	10,184	8,975	8,665
Altoona, Pa.....	30,269	19,710	10,610
Amesbury, Mass.....	9,797	3,355	5,581
Amsterdam, N. Y.....	17,264	9,466	5,426
Anderson, Ind.....	10,759	4,126	3,126
Ann Arbor, Mich.....	9,509	8,061	7,363
Appleton, Wis.....	11,825	8,005	4,518
Asheville, N. C.....	10,443	2,616	1,400
Ashland, Wis.....	16,145	900	.....
Atchison, Kan.....	14,122	15,105	7,054
Atlantic City, N. J.....	13,038	5,477	1,043
Atlanta, Ga.....	65,515	37,409	21,789
Attleboro, Mass.....	14,302	11,111	6,769
Auburn, N. Y.....	25,887	21,924	17,225
Auburn, Me.....	11,228	9,555	6,169
Augusta, Ga.....	33,152	21,891	15,389
Augusta, Me.....	10,521	8,665	7,808
Aurora, Ill.....	19,634	11,873	11,162
Austin, Tex.....	15,324	10,013	4,428
Baltimore, Md.....	433,547	332,313	267,354
Bangor, Me.....	19,090	16,856	8,289
Baton Rouge, La.....	10,397	7,197	6,498
Battle Creek, Mich.....	13,190	7,063	5,838
Bay City, Mich.....	27,836	20,693	7,064
Bayonne, N. J.....	18,996	9,372	3,834
Beatrice, Neb.....	13,921	2,443	624
Beaver Falls, Pa.....	9,734	5,104	1,120
Bellaire, O.....	9,901	8,325	4,033
Belleville, Ill.....	15,360	10,683	8,146
Beverly, Mass.....	10,795	8,456	6,507

CITIES.	1890	1880	1870
Biddeford, Me.....	14,418	12,651	10,282
Binghamton, N. Y.....	35,093	17,317	12,692
Birmingham, Ala.....	26,241	400	.....
Bloomington, Ill.....	22,242	17,180	14,590
Boston, Mass.....	446,507	362,739	250,525
Bradford, Pa.....	10,478	9,197	1,446
Bridgeton, N. J.....	11,471	8,722	.....
Bridgeport, Conn.....	48,856	27,643	18,969
Brockton, Mass.....	27,278	13,608	8,007
Brooklyn, N. Y.....	804,377	566,663	396,099
Brookline, Mass.....	12,076	8,057	.....
Buffalo, N. Y.....	254,457	155,134	117,714
Burlington, Iowa.....	22,528	19,450	14,930
Burlington, Vt.....	14,566	11,365	14,387
Butte City, Mont.....	10,701	3,363	241
Cairo, Ill.....	14,000	9,011	6,267
Cambridge, Mass.....	69,837	52,669	39,634
Camden, N. J.....	58,274	41,659	20,045
Canton, O.....	26,327	12,258	8,660
Carbondale, Pa.....	10,826	7,714	5,393
Cedar Rapids, Ia.....	17,997	10,104	5,940
Charleston, S. C.....	54,592	49,984	48,956
Charlotte, N. C.....	11,555	7,094	4,473
Chattanooga, Tenn.....	29,109	12,892	6,093
Chelsea, Mass.....	27,850	21,782	18,547
Chester, Pa.....	20,167	14,997	9,485
Cheyenne, Wyo.....	10,693	3,456	1,450
Chicago, Ill.....	1,098,576	503,185	298,977
Chicopee, Mass.....	14,007	11,286	9,607
Chillicothe, O.....	11,256	10,938	8,920
Cincinnati, O.....	296,309	255,139	216,239
Cleveland, O.....	261,546	160,146	72,829
Clinton, Iowa.....	13,629	9,052	6,129
Clinton, Mass.....	10,379	8,029	5,420
Cohoes, N. Y.....	22,432	19,416	15,357
Columbia, Pa.....	10,597	8,312	6,461
Columbia, S. C.....	14,508	10,036	9,298
Colorado Springs, Colo.....	11,200	4,226	81
Columbus, Ga.....	18,650	10,123	7,401
Columbus, O.....	90,398	51,647	31,274
Concord, N. H.....	16,948	13,843	12,241
Council Bluffs, Iowa.....	21,388	18,063	10,020
Covington, Ky.....	37,375	29,720	24,505
Cumberland, Md.....	10,030	10,693	8,056
Dallas, Tex.....	38,140	10,358	13,314
Danbury, Conn.....	19,385	11,666	8,753
Danville, Ill.....	11,528	7,733	4,751
Danville, Pa.....	9,073	8,346	8,436
Danville, Va.....	10,285	7,733	3,463
Dayton, O.....	58,868	38,678	30,473
Davenport, Iowa.....	25,161	21,831	20,038
Decatur, Ill.....	16,841	9,547	7,161
Denison, Tex.....	10,959	.....	.....
Denver, Colo.....	106,670	35,629	4,759
Des Moines, Ia.....	50,067	22,408	5,241
Detroit, Mich.....	205,669	116,340	79,577
Dover, N. H.....	12,779	11,687	9,204
Dubuque, Iowa.....	30,147	22,254	18,434
Duluth, Minn.....	32,725	5,415	3,131
Dunkirk, N. Y.....	9,402	7,248	5,231
Easton, Pa.....	14,194	11,924	10,937
E. Liverpool, O.....	10,947	5,568	2,105

POPULATION OF PRINCIPAL CITIES.

375

CITIES.	1890	1880	1870
E. Portland, Ore	10,481	2,934	830
E. Saginaw, Mich.	46,137	19,016	11,350
E. St. Louis, Ill.	15,156	9,185	5,644
Eau Claire, Wis.	17,438	10,119	2,294
Elgin, Ill.	17,429	8,787	5,441
Elizabeth, N. J.	37,670	28,229	20,832
Elkhart, Ind.	11,489	6,953	3,265
Emira, N. Y.	28,070	20,541	15,863
El Paso, Tex.	10,836	736	764
Erie, Pa.	39,699	27,737	19,646
Evansville, Ind.	50,674	29,280	21,839
Everett, Mass.	11,040	4,159	2,220
Fall River, Mass.	74,351	48,961	26,766
Findlay, O.	18,672	4,633	3,315
Fitchburg, Mass.	22,007	12,429	11,260
Flint, Mich.	9,845	8,409	5,380
Fond du Lac, Wis.	11,942	13,094	12,764
Fort Scott, Kan.	11,837	6,372	4,174
Fort Smith, Ark.	11,291	3,098	2,227
Fort Wayne, Ind.	35,349	26,880	17,718
Fort Worth, Tex.	20,725	6,663	.....
Framingham, Mass.	9,636	6,235	4,968
Frederick, Md.	9,621	8,659	8,526
Freeport, Ill.	10,159	8,516	7,889
Fresno, Cal.	10,796	1,112	.....
Galesburg, Ill.	15,212	11,437	10,158
Galveston, Tex.	29,118	22,248	13,818
Gloucester, Mass.	21,262	19,329	13,389
Gloversville, N. Y.	13,796	7,133	4,518
Grand Rapids, Mich.	64,147	32,016	16,507
Greenwich, Conn.	10,120	7,892	7,644
Hagerstown, Md.	11,698	6,627	5,779
Hamilton, O.	17,519	12,122	11,081
Hannibal, Mo.	12,816	11,074	10,125
Harrisburg, Pa.	40,164	30,762	23,104
Hartford, Conn.	53,182	42,015	37,180
Hastings, Neb.	13,793	2,817	.....
Haverhill, Mass.	27,322	18,472	13,052
Hazelton, Pa.	11,818	6,935	4,317
Helena, Mont.	13,834	3,624	3,106
Hoboken, N. J.	43,561	30,999	20,297
Holyoke, Mass.	35,528	21,915	10,733
Hornellsville, N. Y.	10,948	8,195	4,552
Houston, Tex.	27,411	16,513	9,382
Hudson, N. Y.	10,027	8,670	8,615
Huntington, W. Va.	10,084	3,174	.....
Hyde Park, Mass.	10,200	7,088	4,136
Indianapolis, Ind.	107,445	75,056	48,224
Ironton, O.	10,922	8,857	5,686
Ishpeming, Mich.	11,184	6,039	6,103
Ithaca, N. Y.	11,557	9,105	8,462
Jackson, Mich.	20,779	16,105	11,447
Jackson, Tenn.	10,022	5,377	4,119
Jacksonville, Fla.	17,160	7,650	6,912
Jacksonville, Ill.	12,357	10,927	9,202
Jamestown, N. Y.	15,991	9,357	5,336
Janesville, Wis.	10,631	9,018	8,798
Jeffersonville, Ind.	11,274	9,357	7,254
Jersey City, N. J.	163,987	120,722	82,546
Johnstown, N. Y.	10,851	5,013	3,282
Johnstown, Pa.	23,653	8,880	6,028
Joliet, Ill.	27,407	11,657	7,263

CITIES.	1890	1880	1870
Joplin, Mo.....	9,909	7,038	.....
Kalamazoo, Mich.....	17,857	8,057	9,181
Kansas City, Mo.....	132,416	55,785	32,260
Kansas City, Kan.....	38,271	3,202	.....
Keokuk, Iowa.....	14,075	12,117	12,766
Key West, Fla.....	18,058	6,890	5,016
Kingston, N. Y.....	21,181	18,344	6,315
Knoxville, Tenn.....	22,447	9,693	8,682
La Crosse, Wis.....	25,053	14,505	7,785
La Fayette, Ind.....	16,407	14,860	13,506
Lancaster, Pa.....	39,090	25,769	20,233
Lansing, Mich.....	12,630	8,319	5,241
Lansingburg, N. Y.....	10,523	7,432	6,372
Laredo, Tex.....	11,313	3,521	2,046
La Salle, Ill.....	11,610	7,847	5,200
Lawrence, Mass.....	44,559	39,151	28,921
Lawrence, Kan.....	9,975	8,510	8,320
Leadville, Col.....	11,159	14,820	.....
Leavenworth, Kan.....	24,613	16,546	17,873
Lebanon, Pa.....	14,734	8,778	6,727
Lewiston, Me.....	21,668	19,083	13,600
Lexington, Ky.....	22,355	16,656	14,801
Lima, O.....	15,970	7,567	4,500
Lincoln, Neb.....	55,491	13,004	7,889
Little Falls, N. Y.....	9,072	6,910	5,387
Little Rock, Ark.....	22,496	13,133	12,380
Lockport, N. Y.....	16,003	13,522	12,426
Logansport, Ind.....	13,798	11,198	8,950
Long Island City, N. Y.....	30,396	17,129	3,867
Los Angeles, Cal.....	50,394	11,183	5,728
Louisville, Ky.....	161,005	123,758	100,752
Lowell, Mass.....	77,605	59,475	40,928
Lynchburg, Va.....	19,779	15,959	6,825
Lynn, Mass.....	55,684	38,274	28,233
Macon, Ga.....	22,698	12,479	10,810
Madison, Wis.....	13,392	10,324	9,176
Mahanoy, Pa.....	11,291	7,181	5,533
Malden, Mass.....	22,984	12,017	7,367
Manchester, N. H.....	43,983	32,630	23,536
Manchester, Va.....	9,229	5,729	2,599
Manistee, Mich.....	12,299	6,930	3,343
Mansfield, O.....	13,542	9,859	8,029
Marinette, Wis.....	11,513	2,750	.....
Marlboro, Mass.....	13,788	10,127	8,474
Marquette, Mich.....	9,096	4,690	4,000
Marshalltown, Ia.....	9,308	6,240	3,218
Massillon, O.....	10,068	6,836	5,185
McKeesport, Pa.....	20,711	8,212	2,523
Meadville, Pa.....	9,502	8,860	7,103
Medford, Mass.....	11,052	7,573	5,717
Memphis, Tenn.....	64,586	33,592	40,226
Menominee, Mich.....	10,606	3,288	1,597
Meriden, Conn.....	21,230	15,540	10,495
Meridian, Miss.....	10,889	4,008	2,709
Michigan City, Ind.....	10,704	7,366	3,985
Middletown, Conn.....	9,012	11,731	6,923
Middletown, N. Y.....	11,918	8,494	6,049
Milwaukee, Wis.....	204,150	115,587	71,440
Millville, N. J.....	9,957	7,660	6,101
Minneapolis, Minn.....	164,738	46,887	13,066
Mobile, Ala.....	31,822	29,132	32,034
Moline, Ill.....	11,995	7,800	4,166

POPULATION OF PRINCIPAL CITIES.

377

CITIES.	1890	1880	1870
Montgomery, Ala.....	21,790	16,713	10,588
Muncie, Ind.	11,339	5,219	2,992
Muscataine, Ia.	11,432	2,295	6,718
Muskegon, Mich.....	22,668	11,262	6,002
Nanticoke, Pa.	10,037	3,884	.....
Natick, Mass.	9,176	8,479	6,404
Nashua, N. H.	19,266	13,397	10,543
Nashville, Tenn.	76,309	43,350	25,865
Natchez, Miss.	10,132	7,058	9,057
Nebraska City, Neb.....	11,472	4,183	6,050
Newark, N. J.....	181,515	136,508	105,059
Newark, O.....	14,369	9,600	6,698
New Albany, Ind.....	21,008	16,423	14,397
New Bedford, Mass.	40,705	26,845	21,320
New Brighton, N. Y.....	19,000	12,679	7,495
New Britain, Conn.	19,010	11,800	9,480
Newburg, N. Y.	23,263	18,049	17,014
Newburyport, Mass.....	13,914	13,538	12,595
New Brunswick, N. J.....	18,459	17,166	15,056
New Castle, Pa.	11,581	8,418	6,164
New Haven, Conn.	85,981	62,882	50,840
New London, Conn.	13,759	10,537	9,576
New Orleans, La.....	241,995	216,090	191,418
Newport, Ky.	24,938	20,433	15,087
Newport, R. I.	19,449	15,693	12,251
Newton, Mass.	24,357	16,995	12,825
New York, N. Y.....	1,513,501	1,206,299	942,292
Norfolk, Va.	34,986	21,966	19,224
Norristown, Pa.	19,750	13,063	10,753
North Adams, Mass.	16,067	10,191	.....
Northampton, Mass.	14,961	12,172	10,160
Norwalk, Conn.	17,739	7,560	12,119
Norwich, Conn.	16,192	15,112	16,653
Oakland, Cal.	48,540	34,555	10,500
Ogden, Utah.....	14,919	6,069	3,127
Ogdensburg, N. Y.	11,667	10,341	10,072
Oil City, Pa.	10,943	7,315	2,276
Omaha, Neb.	139,526	30,518	16,083
Orange, N. J.	18,774	13,207	9,348
Oswego, N. Y.....	21,826	21,116	20,910
Ottawa, Ill.	11,500	7,834	7,736
Ottumwa, Ia.	13,996	9,004	5,214
Owensboro, Ky.	9,818	6,231	3,437
Paducah, Ky.	13,024	8,036	6,866
Passaic, N. J.	13,027	6,532	.....
Paterson, N. J.....	78,358	51,031	33,579
Pawtucket, R. I.	27,502	19,030	6,619
Peabody, Mass.	10,128	9,028	7,343
Pekskill, N. Y.....	10,026	6,893	6,506
Pensacola, Fla.	11,751	6,845	3,347
Peoria, Ill.	40,758	29,259	22,849
Parth Amboy, N. J.	9,476	4,803	2,861
Petersburg, Va.	23,317	21,656	18,950
Philadelphia, Pa.	1,046,252	847,170	674,022
Pine Bluff, Ark.	9,952	3,203	2,081
Piqua, O.	9,069	6,031	5,967
Pittsburg, Pa.	238,473	156,389	86,076
Pittsfield, Mass.	17,252	13,364	11,112
Pittston, Pa.	10,295	7,472	6,760
Plainfield, N. J.	11,250	8,125	5,695
Plymouth, Pa.	9,341	6,065	2,684
Portland, Me.	36,608	33,810	31,413

CITIES.	1890	1880	1870
Port Huron, Mich.	13,519	8,883	5,973
Portland, Ore.	47,294	17,577	8,293
Portsmouth, N. H.	9,811	9,690	9,211
Portsmouth, O.	12,387	11,321	10,592
Portsmouth, Va.	12,345	11,390	10,590
Pottstown, Pa.	13,201	5,305	4,125
Pottsville, Pa.	14,194	13,253	12,384
Poughkeepsie, N. Y.	22,836	20,207	20,080
Providence, R. I.	122,043	104,857	68,904
Pueblo, Colo.	28,128	3,217	666
Quincy, Ill.	31,478	27,268	24,052
Quincy, Mass.	16,711	10,570	7,442
Racine, Wis.	21,022	16,031	9,880
Raleigh, N. C.	12,798	9,265	7,790
Reading, Pa.	58,926	43,278	33,930
Richmond, Ind.	16,845	12,472	9,445
Richmond, Va.	80,838	66,600	51,038
Rochester, N. Y.	138,327	89,366	62,386
Rockford, Ill.	25,589	13,129	11,049
Rock Island, Ill.	13,596	11,659	7,890
Rome, N. Y.	14,980	12,194	11,000
Rutland, Vt.	11,759	12,149	9,334
Sacramento, Cal.	26,272	21,420	16,283
Saginaw, Mich.	46,215	10,525	7,460
Salem, Mass.	30,735	27,563	24,117
Salt Lake City, Utah	45,025	20,768	12,854
San Antonio, Tex.	38,681	20,550	12,256
Sandusky, O.	19,234	15,838	13,000
San Diego, Cal.	16,153	2,637	2,306
San Francisco, Cal.	297,990	233,959	149,473
San Jose, Cal.	18,027	12,567	9,089
Saratoga Springs, N. Y.	13,124	8,421	7,516
Savannah, Ga.	41,762	30,709	28,235
Schenectady, N. Y.	18,392	13,655	11,026
Scranton, Pa.	83,450	45,850	35,092
Seattle, Wash.	43,914	3,533	1,107
Sedalia, Mo.	13,994	9,561	4,560
Shamokin, Pa.	14,391	8,184	2,282
Sheboygan, Wis.	16,341	7,314	5,310
Shenandoah, Pa.	13,447	10,147	2,951
Shreveport, La.	11,482	8,009	4,607
Sing Sing, N. Y.	10,072	6,578	4,696
Sioux City, Iowa	37,862	7,366	3,401
Sioux Falls, S. Dak.	10,154	2,163	.....
Somerville, Mass.	40,117	24,933	14,685
S. Bend, Ind.	21,786	13,280	7,206
S. Bethlehem, Pa.	10,386	4,925	.....
Spokane Falls, Wash.	22,626	350	.....
Springfield, Ill.	24,852	19,743	17,364
Springfield, Mass.	44,164	33,340	26,703
Springfield, Mo.	21,842	6,522	5,555
Springfield, O.	32,135	20,730	12,652
Stamford, Conn.	15,685	11,297	9,714
Steeltown, Pa.	9,230	2,447	.....
Steubenville, O.	13,363	12,093	8,107
Stillwater, Minn.	11,239	9,055	4,124
St. Joseph, Mo.	52,811	32,431	10,565
St. Louis, Mo.	460,357	350,518	310,864
Stockton, Cal.	14,376	10,282	10,066
St. Paul, Minn.	133,156	41,473	20,030
Superior, Wis.	13,000	655	.....
Syracuse, N. Y.	87,877	51,792	43,051

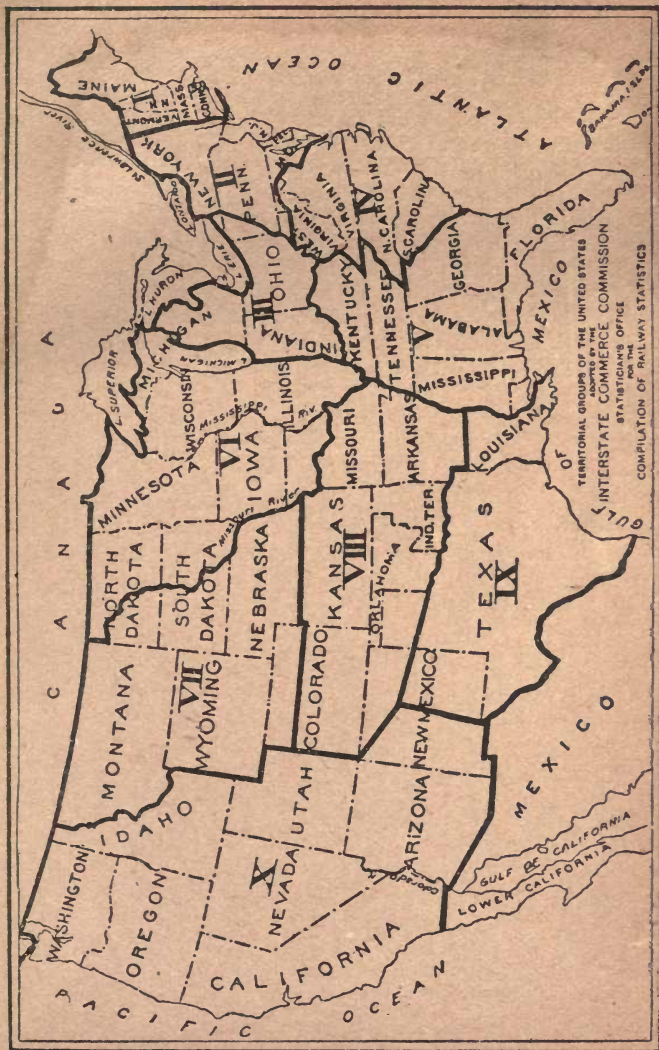
CITIES.	1890	1880	1870
Tacoma, Wash.....	35,858	1,098	73
Taunton, Mass.....	25,389	21,213	18,629
Terre Haute, Ind.....	30,287	26,042	16,103
Tiffin, O.....	10,978	7,879	5,648
Topeka, Kan.....	31,809	15,452	5,790
Toledo, O.....	82,652	50,137	31,484
Trenton, N. J.....	58,488	29,910	22,874
Troy, N. Y.....	60,699	56,747	46,464
Utica, N. Y.....	44,001	33,914	28,804
Vicksburg, Miss.....	13,298	11,814	12,443
Waco, Tex.....	13,667	7,295	3,008
Waltham, Mass.....	18,522	11,712	9,065
Washington, D. C.....	229,296	147,293	109,199
Waterbury, Conn.....	28,591	17,806	10,826
Watertown, N. Y.....	14,733	10,697	9,330
Wausau, Wis.....	9,251	4,277	1,349
West Bay City, Mich.....	12,910	6,397	.....
Westfield, Mass.....	9,798	7,587	6,519
West Troy, N. Y.....	12,942	8,820	10,693
Weymouth, Mass.....	10,843	10,570	9,010
Wheeling, W. Va.....	35,052	30,737	19,280
Wichita, Kan.....	23,735	4,911	689
Wilkesbarre, Pa.....	37,651	23,399	10,174
Williamsport, Pa.....	27,107	18,934	16,030
Wilmington, Del.....	61,437	42,478	30,841
Wilmington, N. C.....	20,008	17,350	13,446
Windham, Conn.....	10,025	8,265	5,412
Winona, Minn.....	18,208	10,208	7,192
Woburn, Mass.....	13,491	10,931	8,560
Woonsocket, R. I.....	20,759	16,050	11,527
Worcester, Mass.....	84,536	58,291	41,105
Yonkers, N. Y.....	31,942	18,892	12,733
York, Pa.....	20,849	13,940	11,003
Youngstown, O.....	33,197	15,435	8,075
Zanesville, O.....	21,117	18,113	10,011



POPULATION OF THE
DIFFERENT STATES
IN 1880 AND 1890.



STATES AND TERRITORIES.	Area Sq. Miles.	When Admitted.	Pop'n in 1890.	Pop'n in 1880.	No. Elec. Votes.
Alabama	50,540	1819	1,513,017	1,262,505	10
Arkansas	53,045	1836	1,128,179	802,525	7
California	158,360	1850	1,208,130	864,694	8
Colorado	103,645	1876	412,198	194,327	3
Connecticut	4,990	1789	746,258	622,700	6
Delaware	2,050	1787	168,493	146,608	3
Florida	58,680	1845	391,422	269,493	4
Georgia	59,475	1789	1,837,353	1,542,180	12
Illinois	56,650	1818	3,826,351	3,077,871	22
Indiana	36,350	1816	2,192,404	1,978,301	15
Iowa	55,275	1837	1,911,896	1,624,615	15
Kansas	82,080	1861	1,427,096	996,096	9
Kentucky	40,400	1792	1,858,635	1,648,690	13
Louisiana	46,420	1812	1,118,587	939,946	8
Maine	29,875	1820	661,086	649,936	6
Maryland	12,210	1789	1,042,390	934,943	8
Massachusetts	8,315	1789	2,238,943	1,783,085	14
Michigan	57,430	1837	2,093,889	1,636,937	13
Minnesota	83,365	1857	1,301,826	780,773	7
Mississippi	46,810	1817	1,289,600	1,131,597	9
Missouri	68,735	1821	2,679,184	2,168,380	16
Montana	146,080	1889	132,159	39,159	...
Nebraska	76,185	1867	1,058,910	452,402	5
Nevada	109,700	1864	45,761	62,266	3
New Hampshire	9,305	1789	376,560	346,991	4
New Jersey	7,815	1789	1,444,933	1,131,116	9
New York	49,170	1789	5,997,853	5,082,871	36
North Carolina	52,250	1789	1,617,947	1,399,750	11
North Dakota	...	1889	182,719	...	...
Ohio	40,760	1802	3,672,316	3,198,062	23
Oregon	94,560	1859	313,767	174,768	3
Pennsylvania	45,215	1789	5,258,014	4,282,891	30
Rhode Island	1,250	1790	345,506	276,531	4
South Carolina	30,170	1789	1,151,149	995,577	9
South Dakota	...	1889	328,808	...	...
Tennessee	42,050	1796	1,767,518	1,542,359	12
Texas	265,780	1845	2,235,523	1,591,749	13
Vermont	9,565	1791	332,422	332,286	4
Virginia	42,450	1789	1,655,980	1,512,565	12
Washington	69,180	1889	349,390	75,116	...
West Virginia	24,780	1863	762,794	618,457	6
Wisconsin	56,040	1847	1,686,880	1,315,497	11
Alaska	561,409	...	...	...	...
Arizona	113,020	...	59,620	40,440	...
Dakota	...	...	...	135,177	...
District of Columbia	...	...	280,392	177,624	...
Idaho	84,800	...	84,385	32,610	...
Indian	64,609	...	...	...	...
Montana	...	...	...	...	...
New Mexico	122,580	...	153,593	119,565	...
Oklahoma	...	...	61,834	...	...
Utah	84,900	...	207,905	143,963	...
Wyoming	99,890	...	60,222	20,789	...



INTER-STATE COMMERCE MAP,
SHOWING THE DIVISIONS AND SECTIONS FOR THE DIFFERENT FREIGHT RATES.

TERRITORIAL GROUPS OF THE UNITED STATES
ADOPTED BY THE
INTER-STATE COMMERCE COMMISSION
STATISTICIAN'S OFFICE
PAUL
COMPILATION OF RAILWAY STATISTICS

THE INTER-STATE COMMERCE LAW.

1. The opposite page shows the map of the UNITED STATES, and the divisions of railroad territory made by the INTER-STATE COMMERCE LAW. January 1st, 1892, there were 171,117 miles of railroad in the United States. The section of country through which railroads pass is divided into 10 sections, and the railways in these 10 divisions are grouped together on the basis of similarity as to the cost and business expenses of running and maintaining the roads. Thus, for example:— In group II you will find the States of New York, Pennsylvania, New Jersey, Maryland and Delaware, the most densely populated States, in which the cost of railroads per mile was the most expensive, on the account of density of population and amount of travel and freightage. The cost per mile for passengers carried is 2.02 cents, and the cost of a ton of freight per mile is $\frac{1}{4}$ cent, which is the lowest of any group in the Union.

2. Now contrast with group II group IX or X, whose sparse population, remoteness of trade centers and lack of manufactures, there must consequently be less profit on the capital invested, and consequently it would cost more to carry a passenger per mile, and it would cost more to carry a ton of freight the same distance.

3. Group I receives the smallest revenue per mile for passengers, 1.90 cents; group IX the largest, 2.58 cents per mile. Group III received the least per ton for freight per mile, $.69\frac{1}{2}$ cents; group X the most, namely, 1.65 cents per mile. Group X received the greatest per cent. of passenger earnings. Thus it is seen that rates are made on railroads according to the cost of road and the territory through which they pass, whether thinly or thickly populated, and hence the scale of prices must be governed accordingly. The same uniform rates must prevail in all the different railroad divisions into which the United States is divided by the Inter-State Commerce Law. Each division has its scale of prices, and every railroad company must comply with the law of rates.



**A Complete Set of Parliamentary Rules and Usages
for Public Meetings, Political Gatherings
and Debating Societies.**

OVER THREE HUNDRED POINTS OF ORDER.

Trace up each reference at the right, and then look up the corresponding marks on opposite page, which will give the full information desired.

Forms in which questions may be put.....	13 14 15 16 17 18 19
Questions of precedence of questions	5 6 7 8 9 10 12
Motion to withdraw a motion.....	1 a * A a II x
To take up a question out of its proper order.....	1 a * A b II x
Motion to take from the table.....	1 a * C b II x
Motion to suspend the rules.....	3 a † B a II x
To substitute in the nature of an amendment.....	3 a † A a II x
Motion to make subject a special order.....	3 a † A b II x
Question whether subject shall be discussed.	1 a * A b III y
Motion that committee do not rise.....	1 a * B a II x
Motion to refer a question	3 b † B a II x
Motion to reconsider an undebatable question.....	1 a * B a II z
Motion to reconsider a debatable question....	3 b * B a II x
Reading papers.....	1 a * A a II x
Questions of privilege	3 a † A a II x
Questions touching priority of business.....	1 a † A a II x
Motion for previous question.....	1 a * A b II x
Motion to postpone indefinitely....	3 b * A a II x
Motion to postpone to a definite time.....	4 a † A a II x

Motion for the orders of the day.....	1 a * A a III y
Objection to consideration of question.....	1 a * A b III y
Motion to limit debate on question.....	1 a † A b II x
Motion to lay on the table.....	1 a * C a II x
Leave to continue speaking after indecorum.....	1 a * A a II x
Motion to extend limits of debate on question.....	1 a † A a II x
Motion to commit.....	3 b † A a II x
Motion to close debate on question.....	1 a † A b II x
Call to order.....	1 a * A a III y
Motion to appeal from Speaker's decision generally.....	3 a * A a II y
Motion to appeal from Speaker's decision <i>re</i> indecorum.....	1 a † A a II y
Motion to amend the rules.....	3 a † A b II x
Motion to amend an amendment	3 a * A a II x
Motion to amend	3 a † A a II x
Motion to determine time to which to adjourn.....	2 a † A a II x
Motion to adjourn.....	1 a * B a II x

1. Question undebatable; sometimes remarks tacitly allowed.
2. Undebatable if another question is before the assembly.
3. Debatable question.
4. Limited debate only on propriety of postponement.
 - a. Does not allow reference to main question.
 - b. Opens the main question to debate.
- *. Cannot be amended.
- †. May be amended.
- A. Can be reconsidered.
- B. Cannot be reconsidered.
- C. An affirmative vote on this question cannot be reconsidered.
- b. Requires two-third vote, unless special rules have been enacted.
 - a. Simple majority suffices to determine the question.
- II. Motion must be seconded.
- III. Does not require to be seconded.
- x. Not in order when another has the floor.
- y. Always in order though another may have the floor.
- z. May be moved and entered on the record when another has the floor, but the business then before the assembly may not be put aside. The motion must be made by one who voted with the prevailing side, and on the same day the original vote was taken.
5. Fixing the time to which an adjournment may be made; ranks first.
6. To adjourn without limitation; second.
7. Motion for the Orders of the Day; third.
8. Motion to lay on the table; fourth.
9. Motion for the previous question; fifth.
10. Motion to postpone definitely; sixth.
12. Motion to commit; seventh.
13. Motion to amend; eighth.
14. Motion to postpone indefinitely; ninth.
15. On motion to strike out words, "Shall the words stand part of the motion?" unless a majority sustains the words they are struck out.
16. On motion for previous question the form to be observed is: "Shall the main question be now put?" This, if carried, ends debate.
17. On an appeal from the chair's decision, "Shall the decision be sustained as the ruling of the house?" The chair is generally sustained.
18. On motion for Orders of the Day, "Will the house now proceed to the Orders of the day?" This, if carried, supersedes intervening motions.
19. When an objection is raised to considering question, "Shall the question be considered?" objection may be made by any member before debate has commenced, but not subsequently.

HOW TO MIX PAINTS OF VARIOUS COLORS.



A correspondent asks us a question on this subject, and we have no doubt there are numerous painter's manuals, or books of instruction, in existence; but many of these are not very reliable. We give the following table of compound colors, showing the simple colors which produce them, which may be of some service to our inquirer.

Buff—White, yellow ochre and red.
 Chestnut—Red, black and yellow.
 Chocolate—Raw umber, red and black.
 Claret—Red, umber and black.
 Copper—Red, yellow and black.
 Dove—White, vermilion, blue and yellow.
 Drab—White, yellow ochre, red and black.
 Fawn—White, yellow and red.
 Flesh—White, yellow ochre and vermilion.
 Freestone—Red, black, yellow ochre and white.
 French Grey—White, prussian blue and lake.
 Grey—White lead and black.
 Gold—White, stone ochre and red.
 Green Bronze—Chrome green, black and yellow.
 Green Pea—White and chrome green.
 Lemon—White and chrome yellow.
 Limestone—White, yellow ochre, black and red.
 Olive—Yellow, blue, black and white.
 Orange—Yellow and red.
 Peach—White and vermilion.
 Pearl—White, black and blue.
 Pink—White, vermilion and lake.
 Purple—Violet, with more red and white.
 Rose—White and madder lake.
 Sandstone—White, yellow ochre, black and red.
 Snuff—Yellow and vandyke brown.
 Violet—Red, blue and white.

In the table on preceding page of the combination of colors required to produce a desired tint, the first-named color is always the principal ingredient, and the others follow in the order of their importance. Thus in mixing a limestone tint, white is the principal ingredient, and the red the color of which the least is needed. The exact proportions of each color must be determined by experiment with a smaller quantity. It is best to have the principal ingredient thick, and add to it the other paints thinner.



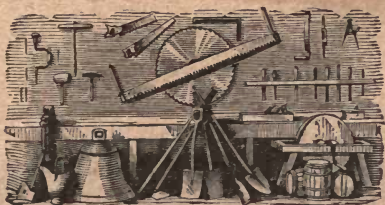
PAINTING RULES.

One coat, or priming, will take, per 100 yards of painting 20 pounds of lead and 4 gallons of oil. Two-coat work, 40 pounds of lead and 4 gallons of oil. Three-coat, the same quantity as two-coat; so that a fair estimate for 100 yards of three-coat work would be 100 pounds of lead and 16 gallons of oil.

One gallon priming color will cover 50 superficial yards; white zinc, 50 yards; white paint, 44 yards; lead color, 50 yards; black paint, 50 yards; stone color, 4 yards; yellow paint, 44 yards; blue color, 45 yards; green paint, 45 yards; bright emerald green, 25 yards; bronze green, 75 yards.

One pound of paint will cover about four superficial yards the first coat, and about 6 each additional coat. One pound of putty, for stopping, every 20 yards. One gallon of tar and one pound of pitch will cover 12 yards superficial the first coat, and 17 yards each additional coat. A square yard of new brick wall requires, for the first coat of paint in oil, $\frac{3}{4}$ pound; for the second 3 pounds; for the third, 4 pounds.

A day's work on the outside of a building is 100 yards of the first coat, and 80 yards of either second or third coat. An ordinary door, including casings, will, on both sides, make 8 to 10 yards of painting, or about 5 yards to a door without the casings. An ordinary window makes about $2\frac{1}{2}$ or 3 yards.



How to Write Your Name on Iron Tools.

1. Melt a little beeswax or hard tallow and pour it on the iron at the place intended to be marked. After the wax or tallow cools take an awl or sharp piece of iron and write your name in it.

2. Pour a little nitric acid on the wax, where you have written your name, and allow it to remain a few moments. Then wipe off the wax, and your name remains indelibly marked as written in the wax.

3. Be careful and allow none of the acid to come in contact with your clothes or hands.



How to Write Your Name on Glass.

1. Apply beeswax and write your name as in the above.

2. Then instead of nitric acid, apply hydrofluoric acid, and your name will remain permanently written on the clear surface of the glass.

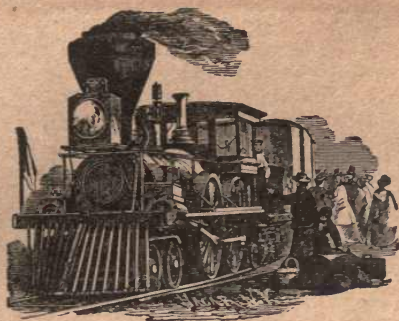
Old Superstitions.

Born on Monday, fair in the face.
 Born on Tuesday, full of God's grace.
 Born on Wednesday, best to be had.
 Born on Thursday, merry and glad.
 Born on Friday, worthily given.
 Born on Saturday, work hard for a living.
 Born on Sunday, shall never know want.



The Sundays Observed by the Different Nations.

Monday,	.	.	.	.	.	.	GREEKS.
Tuesday,	.	.	.	.	.	.	PERSIANS.
Wednesday,	.	.	.	.	.	.	ASSYRIANS.
Thursday,	.	.	.	.	.	.	EGYPTIANS.
Friday,	.	.	.	.	.	.	TURKS.
Saturday,	.	.	.	.	.	.	ISRAELITES.
Sunday,	.	.	.	.	.	.	CHRISTIANS.



Liability of Railroad and Express Companies.

1. *Common Carriers.* Where goods are entrusted to a common carrier, such as railroads, steamboats, etc., to be transported from place to place, the carrier impliedly promises ordinary diligence, and they are liable for carelessness and negligence. Any accident or delay on account of carelessness will hold the company in whose possession the goods have been entrusted.

2. *Duty of Carriers.* It is the duty of carriers to take the utmost care of goods from the moment they are received, and to obey the directions of the owner or shipper.

3. *Responsibility.* Common carriers are not responsible for damages caused by the act of God, such as winds, storms, floods earthquakes, etc.

4. *Damages.* Any damages that have occurred to the goods in possession of the carrier must be made good if it occurred by carelessness of any of the employees.

5. *Loss by Fire.* The carrier is liable for any and all loss occasioned by accidental fire.

6. *Perishable Goods.* Carriers are not responsible for loss to fruits that decay in their possession or goods shipped in defective boxes, such as glassware not properly packed, and other articles that are easily broken. Goods must be properly packed in order to make the carrier responsible.

7. *Receipt.* In shipping goods by freight or express a receipt should always be taken and safely laid away.

8. *Collecting Damages.* In case of damages to goods the railroad or express company should be duly notified and the amount of damages stated, or sworn to before proper officers and with sufficient evidence if required.

Damages Recoverable for Unreasonable Delay in Forwarding Baggage.

The measure of damages recoverable for a common carrier's unreasonable delay in forwarding a passenger's baggage is the value of the use of the property to owner during the delay in delivering it. As to what that value is the opinion of persons familiar with the facts, together with the facts and conditions, will be considered. It would be difficult, in such cases, to determine the value of use by a mere statement of the facts. And the opinion of persons having a knowledge of the facts though some evidence, is not an absolute guide, but an assistance, which is available in the absence of more reliable proof. *Gulf, C. & S. F. Ry. Co. v. Vancil. C. Civil Appeals 21 S. W. Rep. 303:*

Liability of Common Carriers for Loss or Injury of Freight.

A common carrier must pay the market value, at the point of destination, of all property intrusted to it for transportation, which, through its fault, is lost or destroyed, and is not delivered. The law, also, is that if a carrier receives property for transportation, and delivers it at the end of its route, but through its fault it is damaged, and it fails to deliver it in the same condition as when received, it must pay the difference between the value of the property in its damaged condition, at the point of destination, and what the value of the property would have been at that place if delivered in the same condition as when it was received for transportation. *New York L. E. & W. R. Co. v. Estill. S. C. U. S. 13 Sup. Ct. Rep. 444.*



“Who Shall I Marry?”

The Right of Married Women to Own Property.

By the old common law a married woman had few rights. She was subject to the authority of her husband, and he could rule over her, but the states have changed the common law and the rights of married women are now recognized by every court.

1. All property owned by the wife before marriage, or re-

ceived after marriage and held as her separate property, can be sold and transferred without the consent of her husband.

2. If a husband fails to make proper provision for the support of his wife, the law will compel him to furnish her proper support if he has sufficient property.

3. The wife must support her husband out of her separate property when he has no separate property and is without help or means of self-support.

4. The earnings of the wife are not liable for the debts of the husband.

5. The separate property of the wife is not liable for the debts of her husband.

6. The property owned by the husband before marriage, or acquired after marriage by gift or inheritance, is his separate property; but his wife, however, has a dower interest in the real estate.

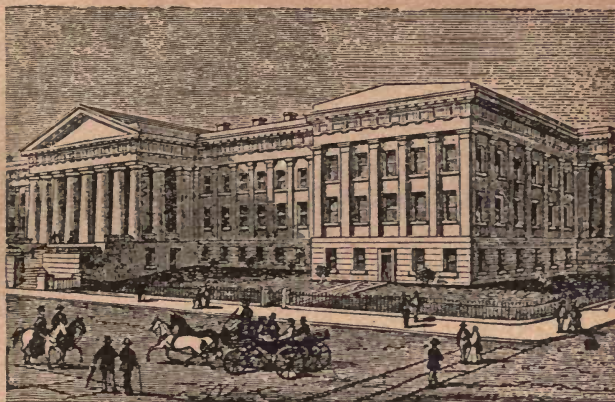
7. The wife who deserts her husband cannot hold him for her support, unless she was justified in leaving, or offers to return.

8. The earnings of the wife and her minor children after living separate from her husband are the property of the wife.

9. If husband or wife transfer real estate of any kind, both must sign the deed, mortgage or contract.

Authority of Wife Living Apart from Husband to Bind Him.

Whether or not the person who supplies a wife with necessities with knowledge at the time of her husband's provision for her support, the presumption of a wife's authority to pledge her husband's credit is negatived by the fact of their living apart, and the tradesman who supplies her under such circumstances upon the credit of her husband, and without his express sanction or approval, does so at his own peril, and in order to charge her husband with supplies furnished her he must show that they were not only of the kind usually denominated "necessaries," because their need is common to all persons, but that, in consequence of the inadequacy of the husband's provision, they were actually required for the wife's proper support, commensurate with his means, her wonted living as his spouse, and her station in the community. *Bloomington vs. Brinckerhoff*. *C. Common Pleas, N. Y. City and County*. 20 *N. Y. Sup.* 858.



UNITED STATES PATENT OFFICE.

HOW TO SECURE A PATENT.

Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement, not known and used by others in this country, and not patented or described in any printed publication in this or any foreign country, and not in public use nor on sale for more than two years prior to his application, may upon payment of the required fees, obtain a patent for it.

FEES REQUIRED BY LAW.

1. *Application.* On filing each original application for a patent except in design cases, fifteen dollars.
2. *Original Patent.* On issuing each original patent, except in design cases, twenty dollars.
3. *In Design Cases.* For three years and six months, ten dollars; for seven years, fifteen dollars; for fourteen years, thirty dollars.
4. *Caveat.* On filing each caveat, ten dollars.

5. *Re-Issue of Patent.* On every application for the re-issue of a patent, thirty dollars.

6. *Disclaimer.* On filing each disclaimer, ten dollars.

7. *Extension of Patent.* On every application for the extension of a patent, fifty dollars.

8. *Grant of Extension.* On the granting of every extension of a patent, fifty dollars.

9. *First Appeal.* On an appeal for the first time from the primary examiners to the examiner-in-chief, ten dollars.

10. *Every Appeal.* On every appeal from the examiner-in-chief to the commissioner, twenty dollars.

11. *Certified Copies of Patents.* For certified copies of patents and other papers, including certified printed copies, ten cents per hundred words.

12. *Recording.* For recording every assignment, agreement, power-of-attorney, or other paper, of three hundred words or under, one dollar; of over three hundred and under one thousand words, two dollars; of over one thousand words, three dollars.

13. *Copies of Drawing.* For copies of drawings, the reasonable cost of making them.

14. *Full Information.* These fees may be paid to the Commissioner of Patents, or to the Treasurer or any of the assistant treasurers of the United States. If you desire to secure a patent write to the Commissioner of Patents, Washington, D. C., and you will receive all the necessary papers, blanks, and complete instructions and directions.

How to Secure an Appointment under the Civil Service Law.



OFFICE SEEKERS WELCOMING A NEWLY ELECTED MEMBER OF CONGRESS ON HIS ARRIVAL AT WASHINGTON.

1. In 1883 Congress passed a law for the improvement of the civil service in the United States. This law provides for three commissioners appointed by the President. They have general charge of filling the vacancies in the various subordinate departments at Washington, and in all custom-houses and postoffices having as many as fifty office-holders.

2. There are over 120,000 clerks in the government employ by whom the business of each administration is carried on. About 5000 of these are directly appointed by the President; about 15,000 are under what is known as the "Civil Service Rules." Thus it is seen that a great body of officeholders are appointed by the heads of departments.

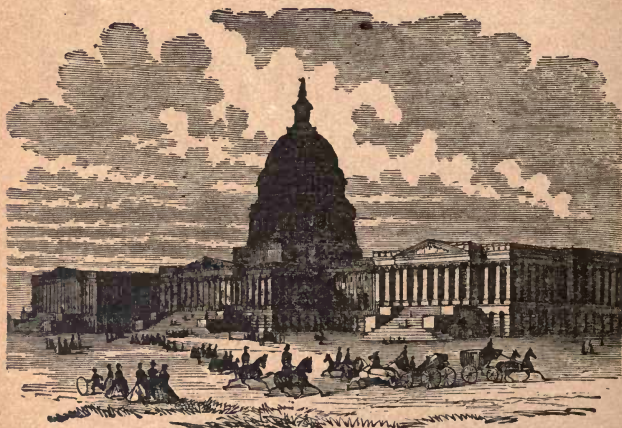
3. In order to have better service and secure men according to their fitness rather than party affiliation, a system of competitive examinations has been organized, and the competitors are required to be examined on the following subjects: 1. Orthography, penmanship and copying, 2. Arithmetic — fundamental rules, fractions and percentage 3. Interest, discount and the elements of book-keeping and of accounts. 4. Elements of the English language, letter writing, and the proper construction of sentences. 5. Elements of the geography, history and government of the U. S.

4. A standing of 65 per cent. in the first three branches is necessary in order to qualify an applicant for an appointment. Where special qualifications are necessary, special examinations are given.

5. Every applicant must furnish proof that he is of good moral character and in good health.

6. There is a board of examiners in each of the principal cities of the United States, and several examinations are held each year. Several of our States have adopted the principles of the general government, and are employing clerks under their own civil service rules.

7. If you desire to enter an examination, address, "Civil Service Commissioner", Washington, D. C., and you will secure a full set of papers, and complete information as to time and place where the examinations are held, and full instructions for entering same.



VIEW OF THE CAPITOL AT WASHINGTON, D. C.

THE COST OF SMOKING.

The following figures show the expense of smoking two cigars and three cigars a day, at 5 cents each, and at 10 cents each, from the age of 20 to the end of each period of five years, up to the age of 70, 6 per cent. compound interest semi-annually being reckoned upon the money.

From the Age of—	Two Cigars a Day at 5 Cents Each.		Three Cigars a Day at 5 Cents Each.	
	Principal.	Prin. & Int.	Principal.	Prin. & Int.
20 to 25 years.....	\$ 182.50	\$ 209.21	\$ 273.75	\$ 313.95
20 to 30 ".....	365.00	490.39	547.50	745.74
20 to 35 ".....	574.50	868.25	821.25	1,314.72
20 to 40 ".....	730.00	1,376.08	1,095.00	2,081.16
20 to 45 ".....	912.50	2,058.44	1,368.75	3,110.74
20 to 50 ".....	1,095.00	3,094.99	1,642.50	4,494.41
20 to 55 ".....	1,277.50	4,367.46	1,916.25	6,353.87
20 to 60 ".....	1,460.00	6,078.73	2,190.00	8,655.02
20 to 65 ".....	1,642.50	8,378.52	2,463.75	12,215.36
20 to 70 ".....	1,825.00	11,469.25	2,737.10	16,216.37

From the Age of—	Two Cigars a Day at 10 Cents Each.		Three Cigars a Day at 10 Cents Each.	
	Principal.	Prin. & Int.	Principal.	Prin. & Int.
20 to 25 years.....	\$ 365.00	\$ 418.43	\$ 547.50	\$ 627.95
20 to 30 ".....	730.00	980.78	1,095.00	1,471.56
20 to 35 ".....	1,095.00	1,736.52	1,642.50	2,717.85
20 to 40 ".....	1,460.00	2,752.20	2,190.00	4,281.24
20 to 45 ".....	1,825.00	4,115.92	2,737.50	6,382.47
20 to 50 ".....	2,190.00	5,949.88	3,285.00	9,205.16
20 to 55 ".....	2,555.00	8,414.47	3,832.50	12,998.61
20 to 60 ".....	2,920.00	11,738.03	4,380.00	18,100.14
20 to 65 ".....	3,285.00	16,093.51	3,927.50	24,952.72
20 to 70 ".....	3,650.00	21,937.72	5,475.00	34,162.14



HOW TO USE THE HOG AND CATTLE TABLE.

HOGS.

What will be the cost of 3345 pounds of live hogs, at \$3.25 per hundred weight?—See table.

$$3300 @ 3.25 = \$107.25.$$

$$45 @ 3.25 = 1.46.$$

\$108.71. Ans.

CATTLE.

What will 2255 pounds of live cattle cost, at \$2.65 per hundred weight?

$$2200 @ \$2.50 = \$55.00.$$

$$55 @ 2.50 = 1.38.$$

$$2200 @ 15c. 3.30.$$

$$55 @ 15c. 08.$$

\$59.76. Ans.

N. B.—In above example get the amount first from table for the 2200 pounds at \$2.50, then for 55 pounds. Now you have the amount at \$2.50 per hundred weight. To make it \$2.65, take from the table the amount of 2255 at 15c. per hundred weight, and you will have the amount for all at \$2.65 per cwt.

HOG AND CATTLE TABLE.

399

The first column gives the number of pounds and the top of each column the price per pound or hundred weight.

Weight.	5c.	10c.	15c.	20c.	30c.	40c.	50c.	60c.	70c.	80c.	90c.
3	.00	.00	.00	.01	.01	.01	.02	.02	.02	.02	.03
5	.00	.01	.01	.01	.01	.02	.03	.03	.04	.04	.05
10	.01	.01	.02	.02	.03	.04	.05	.06	.07	.08	.09
15	.01	.02	.02	.03	.05	.06	.08	.09	.11	.12	.14
20	.01	.02	.03	.04	.06	.08	.10	.12	.14	.16	.18
25	.01	.03	.04	.05	.08	.10	.13	.15	.18	.20	.22
30	.02	.03	.05	.06	.09	.12	.15	.18	.21	.24	.27
35	.02	.04	.05	.07	.11	.14	.18	.21	.25	.28	.32
40	.02	.04	.06	.08	.12	.16	.20	.24	.28	.32	.36
45	.02	.05	.07	.09	.14	.18	.23	.27	.32	.36	.41
50	.03	.05	.08	.10	.15	.20	.25	.30	.35	.40	.45
55	.03	.06	.08	.11	.17	.22	.28	.33	.39	.44	.50
60	.03	.06	.09	.12	.18	.24	.30	.36	.42	.48	.54
65	.03	.07	.10	.13	.20	.26	.33	.39	.46	.52	.59
70	.04	.07	.11	.14	.21	.28	.35	.42	.49	.56	.63
75	.04	.08	.11	.15	.23	.30	.38	.45	.53	.60	.68
80	.04	.08	.12	.16	.24	.32	.40	.48	.56	.64	.72
85	.04	.09	.13	.17	.26	.34	.43	.51	.60	.68	.77
90	.05	.09	.14	.18	.27	.36	.45	.54	.63	.72	.81
95	.05	.10	.14	.19	.29	.38	.48	.57	.67	.76	.86
100	.05	.10	.15	.20	.30	.40	.50	.60	.70	.80	.90
200	.10	.20	.30	.40	.60	.80	1.00	1.20	1.40	1.60	1.80
300	.15	.30	.45	.60	.90	1.20	1.50	1.80	2.10	2.40	2.70
400	.20	.40	.60	.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60
500	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
600	.30	.60	.90	1.20	1.80	2.40	3.00	3.60	4.20	4.80	5.40
700	.35	.70	1.05	1.40	2.10	2.80	3.50	4.20	4.90	5.60	6.30
800	.40	.80	1.20	1.60	2.40	3.20	4.00	4.80	5.60	6.40	7.20
900	.45	.90	1.35	1.80	2.70	3.60	4.50	5.40	6.30	7.20	8.10
1000	.50	1.00	1.50	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00
1100	.55	1.10	1.65	2.20	3.30	4.40	5.50	6.60	7.70	8.80	9.90
1200	.60	1.20	1.80	2.40	3.60	4.80	6.00	7.20	8.40	9.60	10.80
1300	.65	1.30	1.95	2.60	3.90	5.20	6.50	7.80	9.10	10.40	11.70
1400	.70	1.40	2.10	2.80	4.20	5.60	7.00	8.40	9.80	11.20	12.60
1500	.75	1.50	2.25	3.00	4.50	6.00	7.50	9.00	10.50	12.00	13.50
1600	.80	1.60	2.40	3.20	4.80	6.40	8.00	9.60	11.20	12.80	14.40
1700	.85	1.70	2.55	3.40	5.10	6.80	8.50	10.20	11.90	13.60	15.30
1800	.90	1.80	2.70	3.60	5.40	7.20	9.00	10.80	12.60	14.40	16.20
1900	.95	1.90	2.85	3.80	5.70	7.60	9.50	11.40	13.30	15.20	17.10
2000	1.00	2.00	3.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
2100	1.05	2.10	3.15	4.20	6.30	8.40	10.50	12.60	14.70	16.80	18.90
2200	1.10	2.20	3.30	4.40	6.60	8.80	11.00	13.20	15.40	17.60	19.80
2300	1.15	2.30	3.45	4.60	6.90	9.20	11.50	13.80	16.10	18.40	20.70
2400	1.20	2.40	3.60	4.80	7.20	9.60	12.00	14.40	16.80	19.20	21.60
2500	1.25	2.50	3.75	5.00	7.50	10.00	12.50	15.00	17.50	20.00	22.50
2600	1.30	2.60	3.90	5.20	7.80	10.40	13.00	15.60	18.20	20.80	23.40
2700	1.35	2.70	4.05	5.40	8.10	10.80	13.50	16.20	18.90	21.60	24.30
2800	1.40	2.80	4.20	5.60	8.40	11.20	14.00	16.80	19.60	22.40	25.20
2900	1.45	2.90	4.35	5.80	8.70	11.60	14.50	17.40	20.30	23.20	26.10
3000	1.50	3.00	4.50	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00
3100	1.55	3.10	4.65	6.20	9.30	12.40	15.50	18.60	21.70	24.80	27.90
3200	1.60	3.20	4.80	6.40	9.60	12.80	16.00	19.20	22.40	25.60	28.80
3300	1.65	3.30	4.95	6.60	9.90	13.20	16.50	19.80	23.10	26.40	29.70
3400	1.70	3.40	5.10	6.80	10.20	13.60	17.00	20.40	23.80	27.20	30.60
3500	1.75	3.50	5.25	7.00	10.50	14.00	17.50	21.00	24.50	28.00	31.50
3600	1.80	3.60	5.40	7.20	10.80	14.40	18.00	21.60	25.20	28.80	32.40
3700	1.85	3.70	5.55	7.40	11.10	14.80	18.50	22.20	25.90	29.60	33.30
3800	1.90	3.80	5.70	7.60	11.40	15.20	19.00	22.80	26.60	30.40	34.20
3900	1.95	3.90	5.85	7.80	11.70	15.60	19.50	23.40	27.30	31.20	35.10
4000	2.00	4.00	6.00	8.00	12.00	16.00	20.00	24.00	28.00	32.00	36.00
4100	2.05	4.10	6.15	8.20	12.30	16.40	20.50	24.60	28.70	32.80	36.90
4200	2.10	4.20	6.30	8.40	12.60	16.80	21.00	25.20	29.40	33.60	37.80
4300	2.15	4.30	6.45	8.60	12.90	17.20	21.50	25.80	30.10	34.40	38.70
4400	2.20	4.40	6.60	8.80	13.20	17.60	22.00	26.40	30.80	35.20	39.60
4500	2.25	4.50	6.75	9.00	13.50	18.00	22.50	27.00	31.50	36.00	40.50

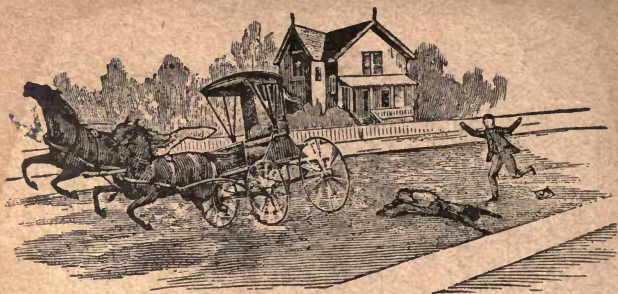
The first column gives the number of pounds and the top of each column the price per pound or hundred weight.

Weight.	\$1.00	\$2.00	\$2.50	\$2.75	\$3.00	\$3.25	\$3.50	\$3.75	\$4.00	\$4.25	\$4.50
3	.03	.06	.08	.08	.09	.10	.11	.11	.12	.13	.14
5	.05	.10	.13	.14	.15	.16	.18	.19	.20	.21	.23
10	.10	.20	.25	.28	.30	.33	.35	.38	.40	.43	.45
15	.15	.30	.38	.41	.45	.49	.53	.56	.60	.64	.68
20	.20	.40	.50	.55	.60	.65	.70	.75	.80	.85	.90
25	.25	.50	.63	.69	.75	.81	.88	.94	1.00	1.06	1.13
30	.30	.60	.75	.83	.90	.98	1.05	1.13	1.20	1.28	1.35
35	.35	.70	.88	.96	1.05	1.14	1.23	1.31	1.40	1.49	1.58
40	.40	.80	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80
45	.45	.90	1.13	1.24	1.35	1.46	1.58	1.69	1.80	1.91	2.03
50	.50	1.00	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25
55	.55	1.10	1.38	1.51	1.65	1.79	1.93	2.06	2.20	2.34	2.48
60	.60	1.20	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70
65	.65	1.30	1.63	1.79	1.95	2.11	2.28	2.44	2.60	2.76	2.93
70	.70	1.40	1.75	1.93	2.10	2.28	2.45	2.63	2.80	2.98	3.15
75	.75	1.50	1.88	2.06	2.25	2.44	2.63	2.81	3.00	3.19	3.38
80	.80	1.60	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60
85	.85	1.70	2.13	2.34	2.55	2.76	2.98	3.19	3.40	3.61	3.83
90	.90	1.80	2.25	2.48	2.70	2.92	3.15	3.38	3.60	3.83	4.05
95	.95	1.90	2.38	2.61	2.85	3.08	3.33	3.56	3.80	4.04	4.28
100	1.00	2.00	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50
200	2.00	4.00	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
300	3.00	6.00	7.50	8.25	9.00	9.75	10.50	11.25	12.00	12.75	13.50
400	4.00	8.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00
500	5.00	10.00	12.50	13.75	15.00	16.25	17.50	18.75	20.00	21.25	22.50
600	6.00	12.00	15.00	16.50	18.00	19.50	21.00	22.50	24.00	25.50	27.00
700	7.00	14.00	17.50	19.25	21.00	22.75	24.50	26.25	28.00	29.75	31.50
800	8.00	16.00	20.00	22.00	24.00	26.00	28.00	30.00	32.00	34.00	36.00
900	9.00	18.00	22.50	24.75	27.00	29.25	31.50	33.75	36.00	38.25	40.50
1000	10.00	20.00	25.00	27.50	30.00	32.50	35.00	37.50	40.00	42.50	45.00
1100	11.00	22.00	27.50	30.25	33.00	35.75	38.50	41.25	44.00	46.75	49.50
1200	12.00	24.00	30.00	33.00	36.00	39.00	42.00	45.00	48.00	51.00	54.00
1300	13.00	26.00	32.50	35.75	39.00	42.25	45.50	48.75	52.00	55.25	58.50
1400	14.00	28.00	35.00	38.50	42.00	45.50	49.00	52.50	56.00	59.50	63.00
1500	15.00	30.00	37.50	41.25	45.00	48.75	52.50	56.25	60.00	63.75	67.50
1600	16.00	32.00	40.00	44.00	48.00	52.00	56.00	60.00	64.00	68.00	72.00
1700	17.00	34.00	42.50	46.75	51.00	55.25	59.50	63.75	68.00	72.25	76.50
1800	18.00	36.00	45.00	49.50	54.00	58.50	63.00	67.50	72.00	76.50	81.00
1900	19.00	38.00	47.50	52.25	57.00	61.75	66.50	71.25	76.00	80.75	85.50
2000	20.00	40.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00
2100	21.00	42.00	52.50	57.75	63.00	68.25	73.50	78.75	84.00	89.25	94.50
2200	22.00	44.00	55.00	60.50	66.00	71.50	77.00	82.50	88.00	93.50	99.00
2300	23.00	46.00	57.50	63.25	69.00	74.75	80.50	86.25	92.00	97.75	103.50
2400	24.00	48.00	60.00	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00
2500	25.00	50.00	62.50	68.75	75.00	81.25	87.50	93.75	100.00	106.25	112.50
2600	26.00	52.00	65.00	71.50	78.00	84.50	91.00	97.50	104.00	110.50	117.00
2700	27.00	54.00	67.50	74.25	81.00	87.75	94.50	101.25	108.00	114.75	121.50
2800	28.00	56.00	70.00	77.00	84.00	91.00	98.00	105.00	112.00	119.00	126.00
2900	29.00	58.00	72.50	79.75	87.00	94.25	101.50	108.75	116.00	123.25	130.50
3000	30.00	60.00	75.00	82.50	90.00	97.50	105.00	112.50	120.00	127.50	135.00
3100	31.00	62.00	77.50	85.25	93.00	100.75	108.50	116.25	124.00	131.75	139.50
3200	32.00	64.00	80.00	88.00	96.00	104.00	112.00	120.00	128.00	136.00	144.00
3300	33.00	66.00	82.50	90.75	99.00	107.25	115.50	123.75	132.00	140.25	148.50
3400	34.00	68.00	85.00	93.50	102.00	110.50	119.00	127.50	136.00	144.50	153.00
3500	35.00	70.00	87.50	96.25	105.00	113.75	122.50	131.25	140.00	148.75	157.50
3600	36.00	72.00	90.00	99.00	108.00	117.00	126.00	135.00	144.00	153.00	162.00
3700	37.00	74.00	92.50	101.75	111.00	120.25	129.50	138.75	148.00	157.25	166.50
3800	38.00	76.00	95.00	104.50	114.00	123.50	133.00	142.50	152.00	161.50	171.00
3900	39.00	78.00	97.50	107.25	117.00	126.75	136.50	146.25	156.00	165.75	175.50
4000	40.00	80.00	100.00	110.00	120.00	130.00	140.00	150.00	160.00	170.00	180.00
4100	41.00	82.00	102.50	112.75	123.00	133.25	143.50	153.75	164.00	174.25	184.50
4200	42.00	84.00	105.00	115.50	126.00	136.50	147.00	157.50	168.00	178.50	189.00
4300	43.00	86.00	107.50	118.25	129.00	139.75	150.50	161.25	172.00	182.75	193.50
4400	44.00	88.00	110.00	121.00	132.00	143.00	154.00	165.00	176.00	187.00	198.00
4500	45.00	90.00	112.50	123.75	135.00	146.25	157.50	168.75	180.00	191.25	202.50

ICE, BRAN, MILL-FEED, STONE, HAY, IRON, COAL, 401
and Cotton Picker's Table.

Pounds.	50¢	55¢	60¢	65¢	70¢	75¢	80¢	85¢	90¢	95¢	1.00	1.05	1.10	1.15	1.20	1.25
5	.03	.03	.03	.04	.04	.04	.04	.05	.05	.05	.05	.05	.06	.06	.06	.06
10	.05	.06	.06	.07	.07	.08	.08	.09	.09	.10	.10	.11	.11	.12	.12	.13
15	.08	.08	.09	.10	.11	.11	.12	.13	.14	.14	.15	.16	.17	.17	.18	.19
20	.10	.11	.12	.13	.14	.15	.16	.17	.18	.19	.20	.21	.22	.23	.24	.25
25	.13	.14	.15	.16	.18	.19	.20	.21	.23	.24	.25	.26	.28	.29	.30	.31
30	.15	.17	.18	.20	.21	.23	.24	.26	.27	.29	.30	.32	.33	.35	.36	.38
35	.18	.19	.21	.23	.25	.26	.28	.30	.32	.33	.35	.38	.39	.40	.42	.44
40	.20	.22	.24	.26	.28	.30	.32	.34	.36	.38	.40	.42	.44	.46	.48	.50
45	.23	.25	.27	.29	.32	.34	.36	.38	.41	.43	.45	.47	.50	.52	.54	.56
50	.25	.28	.30	.33	.35	.38	.40	.43	.45	.48	.50	.53	.55	.58	.60	.63
55	.28	.30	.33	.36	.39	.41	.44	.47	.50	.52	.55	.58	.61	.63	.66	.69
60	.30	.33	.36	.39	.42	.45	.48	.51	.54	.57	.60	.63	.66	.69	.72	.75
65	.33	.36	.39	.42	.46	.49	.52	.55	.59	.62	.65	.69	.72	.75	.78	.81
70	.35	.39	.42	.46	.49	.53	.56	.60	.63	.67	.70	.74	.77	.81	.84	.88
75	.38	.41	.45	.49	.53	.56	.60	.64	.68	.71	.75	.79	.83	.86	.90	.94
80	.40	.44	.48	.52	.56	.60	.64	.68	.72	.76	.80	.84	.88	.92	.96	1.00
85	.43	.47	.51	.55	.60	.64	.68	.72	.77	.81	.85	.89	.94	.98	1.02	1.06
90	.45	.50	.54	.59	.63	.68	.72	.77	.81	.86	.90	.95	.99	1.04	1.08	1.13
95	.48	.52	.57	.62	.67	.71	.76	.81	.86	.90	.95	1.00	1.05	1.09	1.14	1.19
100	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	1.05	1.10	1.15	1.20	1.25
105	.53	.58	.63	.68	.74	.79	.84	.89	.95	1.00	1.05	1.10	1.16	1.21	1.26	1.31
110	.55	.61	.66	.72	.77	.83	.88	.94	.99	1.05	1.10	1.16	1.21	1.27	1.32	1.38
115	.58	.63	.69	.75	.81	.86	.92	.98	1.04	1.09	1.15	1.21	1.27	1.32	1.38	1.44
120	.60	.66	.72	.78	.84	.90	.96	1.02	1.08	1.14	1.20	1.26	1.32	1.38	1.44	1.50
125	.63	.69	.75	.81	.88	.94	1.00	1.06	1.13	1.19	1.25	1.31	1.38	1.44	1.50	1.56
130	.65	.72	.78	.85	.91	.98	1.04	1.11	1.17	1.24	1.30	1.37	1.43	1.50	1.56	1.63
135	.68	.74	.81	.88	.95	1.01	1.08	1.15	1.22	1.28	1.35	1.42	1.49	1.55	1.62	1.69
140	.70	.77	.84	.91	.98	1.05	1.12	1.19	1.26	1.33	1.40	1.47	1.54	1.61	1.68	1.75
145	.73	.80	.87	.94	1.02	1.09	1.16	1.23	1.31	1.38	1.45	1.52	1.60	1.67	1.74	1.81
150	.75	.83	.90	.98	1.05	1.13	1.20	1.28	1.35	1.43	1.50	1.58	1.65	1.73	1.80	1.88
155	.78	.85	.93	1.01	1.09	1.16	1.24	1.32	1.40	1.48	1.55	1.63	1.71	1.78	1.86	1.94
160	.80	.88	.96	1.04	1.12	1.20	1.28	1.36	1.44	1.52	1.60	1.68	1.76	1.84	1.92	2.00
165	.83	.91	.99	1.07	1.16	1.24	1.32	1.40	1.49	1.57	1.65	1.73	1.82	1.90	1.98	2.06
170	.85	.94	1.02	1.10	1.19	1.28	1.36	1.45	1.53	1.62	1.70	1.79	1.87	1.96	2.04	2.13
175	.88	.96	1.05	1.14	1.23	1.31	1.40	1.49	1.58	1.66	1.75	1.84	1.93	2.01	2.10	2.19
180	.90	.99	1.08	1.17	1.26	1.35	1.44	1.53	1.62	1.71	1.80	1.89	1.98	2.07	2.16	2.25
185	.93	1.02	1.11	1.20	1.30	1.39	1.48	1.57	1.67	1.76	1.85	1.94	2.04	2.13	2.22	2.31
190	.95	1.05	1.14	1.24	1.33	1.43	1.52	1.62	1.71	1.81	1.90	2.00	2.09	2.19	2.28	2.38
195	.98	1.07	1.17	1.27	1.37	1.46	1.56	1.66	1.76	1.85	1.95	2.05	2.15	2.24	2.34	2.44
200	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50
300	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	3.00	3.15	3.30	3.45	2.60	3.75
400	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00

Example :—165 pounds at 1.05=1.73



RESPONSIBILITY IN RUNAWAY HORSES OR TEAMS.

1. If a horse naturally quiet to ride and drive is frightened by a railroad train, steam thrasher, or other causes, not under the control of the rider or driver, does any damage, or injures any person or persons, the owner is not responsible.

2. If horses are known to be vicious, or sustain a runaway reputation, break loose or run away with their driver, or injure any person or persons, the owner is responsible, unless it can be shown that the horses were frightened by some obstacle which would naturally frighten a gentle or ordinarily quiet horse.

3. Persons owning or driving a team must always use proper caution and ordinary diligence, in order to escape any damages that may be done in case his team should break lose and run away.

4. If a person enters the barn or pasture of another, and is injured by a vicious horse or bull, it must be shown that the owner used all reasonable means in the care of his animals for the safety of his help and neighbors.

5. If a person enters upon the land of another, and is injured, he must show good cause for entering upon said land, and also prove ordinary caution, in going where cattle and horses were kept.



FENCE LAWS.

1. Fence laws are generally regulated by State Statutes or local authorities.

2. A few general laws, however, are commonly held in all the States.

3. **LEGAL FENCE.**—First find out from the State Statute or local law what constitutes a legal fence. A legal fence is generally a four foot fence with sufficient boards or wire, or both, to turn cattle and sheep.

4. If cattle or horses break through fences in any way defective or neglected, the owner of the cattle or horses doing the damage is not responsible, if it was not his fence, or the injury brought about through his neglect.

5. Every man is compelled to look after his own part of the fence and keep it in good repair, and look out and restrain his own animals in trespassing upon the lands of another.

6. Owners of adjoining cultivated lands are required to make division fences in common, unless there is a law to the contrary.

7. In erecting division fences according to law, half of it may be placed upon the adjoining land, and the other part must pay half for erecting and maintaining it, or the owner of the adjoining land can build it himself. No man has a right to build a fence on another man's land, unless there is a law that will permit him to do so.

8. Fences are fixtures that pass with the sale of land. Posts or boards that have ever been used as fence on a farm, though when the farm is sold are piled up, and not used at the time for fencing purposes, cannot be removed as personal property.

TRESPASSING ANIMALS.

If cattle, or horses, or sheep, or hogs, or chickens, or dogs, or any other animals, trespass upon the land of a neighbor, they can not be injured or killed by the owner of the land upon which the trespass is committed, no matter how often repeated. The law regulates these matters by damages, and every innocent person is protected, and generally fully compensated for all damages caused by trespassing animals.

Many States and local authorities have laws by which trespassing animals can be taken up, and either held by the party upon whose land the trespassing is committed or placed in a public corral or pound. They are kept there at the expense of the owner, and damages or fines or both must first be paid before the animals can be taken or removed by the owner.

The Findings of Various Courts in the United States, in Important Test Cases.

A PROMISE TO RELEASE A DEBT DOES NOT DISCHARGE IT.—A promise to release a debt is not the same thing as an actual release; and, if there is not sufficient consideration for the promise to release, the promise is not enforceable. And while an actual composition signed by a creditor may have the effect of releasing the debt, a refusal to sign it can not have such an effect, although the signature was promised. Such a promising creditor might see cause to change his mind, for any sufficient reason; and if he did, the act of release is not perfected, —the discharge does not take place. The creditor still retains his lawful claim against the debtor. *McNutt v. Loney*. S. C. Pa. 25 At. Rep. 1088.

PAYMENT OF BANK CHECKS AFTER DEATH OF MAKER.—Some authorities distinguish between cases where Bank Checks are drawn for a valuable consideration and where they are mere gifts, the holding of such authorities being that in the former class of cases death does not revoke the checks, and that in the latter it does. But in the case of gifts when the delivery is coupled with an intent to transfer a present interest in the money presented by the check, and no revocation is attempted, it would seem that the intent of the donor should be given effect, and the transaction be held to transfer a present interest, and a right to the payment of the check after the death of the drawer, as well as before. *May v. Jones*. S. C. Iowa, 54 N. W. Rep 231.



THE RESPONSIBILITY OF OWNING A DOG.

1. Dogs must be kept upon the owners' premises, unless accompanied by the owner or some member of the family.

2. If a Dog annoys travelers upon the public highway by scaring horses and frightening children, the owner is responsible for damages.

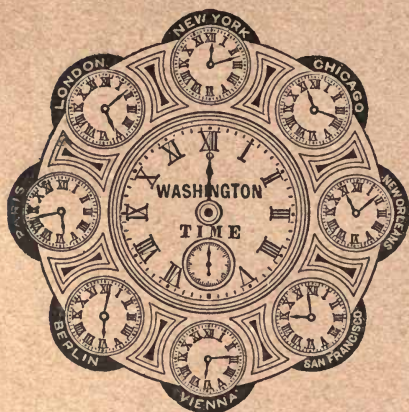
3. The owner of a Dog is responsible for damages caused by his dog trespassing upon the public highway in running after teams or doing other damages.

4. If a Dog not accompanied by its owner annoys travelers upon the public highway, he may be killed, without any claim of damages on the part of the owner of the dog. When a dog becomes a nuisance he may be killed anywhere except on the owner's premises.

5. If a Dog kills sheep or destroys or injures any other domestic animals, the owner is responsible for damages.

6. Every owner of a savage and dangerous dog must keep him properly chained or otherwise secured that no injury may be done to others.

7. If a person on a social or business errand is bitten or otherwise injured by a savage dog on the premises of the owner, the owner is responsible. Dangerous animals are not permitted to run at large, even on the owner's own premises, unless he has sufficient safeguards to protect his neighbors against injury.



Difference of Time Between Washington and Other Principal Cities of the World.

12.00	o'clock (noon)	at	-	-	-	-	-	-	WASHINGTON.
12.12	"	P. M.	-	-	-	-	-	-	New York.
12.24	"	"	-	-	-	-	-	-	Boston
12.27	"	"	-	-	-	-	-	-	Portland.
1.37	"	"	-	-	-	-	-	-	St. John (N. F.)
4.31	"	"	-	-	-	-	-	-	Lisbon.
4.43	"	"	-	-	-	-	-	-	Dublin.
4.55	"	"	-	-	-	-	-	-	Edinburgh.
5.07	"	"	-	-	-	-	-	-	London.
5.17	"	"	-	-	-	-	-	-	Paris.
5.58	"	"	-	-	-	-	-	-	Rome.
6.02	"	"	-	-	-	-	-	-	Berlin.
6.14	"	"	-	-	-	-	-	-	Vienna.
7.04	"	"	-	-	-	-	-	-	Constantinople
11.01	"	"	-	-	-	-	-	-	Calcutta.
12.54	"	A. M.	-	-	-	-	-	-	Pekin.
2.48	"	"	-	-	-	-	-	-	Melbourne.
4.51	"	"	-	-	-	-	-	-	Auckland.
8.58	"	"	-	-	-	-	-	-	San Francisco.
9.40	"	"	-	-	-	-	-	-	Salt Lake.
11.08	"	"	-	-	-	-	-	-	New Orleans.
11.18	"	"	-	-	-	-	-	-	Chicago.
11.52	"	"	-	-	-	-	-	-	Buffalo.
12.00	"	noon	-	-	-	-	-	-	Lima (Peru).

The above table is actual time, not *standard* time.

BUSINESS ABBREVIATIONS.

<i>Acct</i>	Account.	<i>Inv</i>	Inventory.
<i>Advtg</i>	Advertising.	<i>J. or Jour</i>	Journal.
<i>Agmt</i>	Agreement.	<i>J. P.</i>	Journal page.
<i>Agt</i>	Agent.	<i>L. B.</i>	Letter Book.
<i>Am</i>	Amount.	<i>lbs</i>	Pounds.
<i>Art</i>	Article.	<i>L. F.</i>	Ledger Folio.
<i>B. or Bk</i>	Bank.	<i>Mdse</i>	Merchandise.
<i>Bal</i>	Balance.	<i>Mem. or memo</i>	Memorandum.
<i>Bbl</i>	Barrel.	<i>Mols</i>	Molasses.
<i>B. B.</i>	Bill-book or Bank-book.	<i>Nat</i>	National.
<i>B. Ex</i>	Bill of Exchange.	<i>N. B.</i>	(Nota Bene) Take Notice.
<i>B. P. or Bills Pay</i>	Bills Payable.	<i>Net</i>	Without deduc- tion.
<i>B. R. or Bills Rec</i>	Bills Receivable.	<i>O. I. B.</i>	Outward Invoice
<i>Bo't</i>	Bought.	<i>P. or p</i>	Page. [Book
<i>Bush</i>	Bushel.	<i>Payt</i>	Payment.
<i>C. or Ct</i>	Cent.	<i>Pd</i>	Paid.
<i>Cash</i>	Cashier.	<i>Pkg</i>	Package.
<i>C. B.</i>	Cash Book.	<i>Per. or pr</i>	By the.
<i>Cer</i>	Certificate.	<i>per ct</i>	(Per centum) By the hundred.
<i>Chgd</i>	Charged.	<i>P. & L.</i>	Profit and Loss.
<i>Ck</i>	Check.	<i>Pr</i>	Pair.
<i>Co</i>	Company. [ery.	<i>Prem</i>	Premium.
<i>C. O. D.</i>	Collect on Deliv-	<i>prox</i>	(Proximo) The next month.
<i>Com</i>	Commission.	<i>Ps</i>	Piece or Pieces.
<i>Con. or Const</i>	Consignment.	<i>P. C. B.</i>	Petty Cash Book.
<i>Cr</i>	Creditor.	<i>Recd</i>	Received.
<i>Cwt</i>	Hundred weight.	<i>R. R.</i>	Railroad.
<i>D. B.</i>	Day Book.	<i>S. B</i>	Sales Book.
<i>Dep. B</i>	Deposit Book.	<i>S. S.</i>	Steamship.
<i>Dft</i>	Draft.	<i>Shipt</i>	Shipment.
<i>Dis</i>	Discount.	<i>St. Dft</i>	Sight Draft.
<i>Do. or do</i>	(Ditto) The same.	<i>Stg</i>	Sterling.
<i>Doz</i>	Dozen.	<i>Sunds</i>	Sundries.
<i>Dr</i>	Debtor.	<i>Tr. or Trans</i>	Transaction.
<i>Ds. or ds</i>	Days	<i>ult</i>	(Ultimo) The last month.
<i>ea</i>	Each.	<i>viz</i>	(Videlicet) To wit: namely.
<i>E. E.</i>	Errors excepted.	<i>vs</i>	(Versus) Against.
<i>E. & O. E.</i>	Errors and omis- sions excepted.	<i>Yds</i>	Yards.
<i>Ex. or Exch</i>	Exchange.	<i>\$</i>	Dollar.
<i>Exp</i>	Expense.	<i>¢</i>	Cents.
<i>fav</i>	Favor.	<i>£</i>	Pounds Sterling.
<i>F. B. E.</i>	Foreign Bill of Exchange.	<i>d</i>	Pence.
<i>For'd</i>	Forward.	<i>@</i>	At, or to.
<i>Frt</i>	Freight.	<i>%</i>	Per cent.
<i>Ft. or ft.</i>	Foot or Feet.	<i>a/c</i>	Account.
<i>Gal</i>	Gallon.	<i>"</i>	(Ditto) The same.
<i>Guar</i>	Guarantee.	<i>#</i>	Number.
<i>Hdkf</i>	Handkerchief.	<i>✓</i>	Check Mark.
<i>Hhd</i>	Hogshead.	<i>11</i>	One and 1 fourth.
<i>Hund</i>	Hundred.	<i>12</i>	One and 2 fourths.
<i>I. or Inv</i>	Invoice.	<i>13</i>	One and 3 fourths.
<i>I. B.</i>	Invoice Book.		
<i>Ins</i>	Insurance.		
<i>inst</i>	(Instant) The present month.		
<i>Insol</i>	Insolvency.		
<i>Int</i>	Interest.		

BUSINESS DICTIONARY.

- A**
- Abatement.**—A discount allowed for damage or overcharge, or for the payment of a bill before it is due.
- Acceptance.**—An assent and engagement to pay a bill or draft when due.
- Acceptance for Honor.**—An acceptance made after a bill has been protested for non-acceptance, for the honor of the drawer or any indorser.
- Accommodation Paper.**—A bill or note to which a party has put his name to accommodate another, who is to provide payment when due.
- Account.**—A written or printed statement of debits and credits in any business transaction.
- Account Current.**—A detailed statement of the transactions between parties for a certain period, showing the condition of affairs at the *current* or present time.
- Account Sales.**—A detailed statement of a commission merchant to his principal, showing his sales, the expenses attending the same, and the *net proceeds*.
- Accountant.**—A person trained to keep accounts.
- Accrued.**—Increase, or interest due and unpaid.
- Actionaire.**—The owner of shares in a stock company, a stockholder.
- Actuary.**—A registrar or clerk. Generally applied to the manager of a life insurance company.
- Administrator.**—A person appointed to settle the estate of a testator, or to manage an intestate estate.
- Admiralty.**—The power that controls naval affairs in Great Britain.
- Courts of Admiralty.**—A court which decides questions of maritime justice.
- Adulteration.**—The debasing of an article or substance by spurious or less valuable admixture.
- Ad valorem.**—According to value.
- Advance.**—A rise in price, additional profits, stocks above par.
- Adventure.**—Goods sent to sea at the owner's risk, a speculation.
- Adventure in Co.**—Goods sent to be sold on joint account of shippers and consignee.
- Advice.**—Admonition, or suggestions offered, usually in regard to buying and selling goods.
- Affidavit.**—A written statement made upon oath.
- Afreight.**—To hire, as a ship, for transporting freight.
- Agent.**—One intrusted with the business of another, a deputy or factor.
- Agio.**—A term used to denote the difference between the real and nominal value of money.
- Allonge.**—A paper attached to a bill of exchange when there are too many endorsements to be contained on the bill itself.
- Allowance.**—A deduction made, for instance, from the gross weight of goods.
- Ambassador.**—A minister employed by one government to represent it at the court of another.
- Anker.**—A common liquid measure, varying, in different European countries, from nine to ten gallons.
- Antal.**—A wine measure of Hungary, holding about thirteen and a half gallons.
- Anticipate.**—To be before in doing, or pay before due.
- Appraise.**—To set a value on goods or property.
- Appurtenance.**—Adjunct or appendage.
- Arbitration.**—The hearing and decision of a cause between parties in controversy, by chosen persons.
- Arbitration of Exchange.**—The deduction of a proportional or *arbitrated rate* of exchange between two places through an intermediate place, to ascertain the most advantageous method of drawing or remitting.
- Arrear.**—That which remains unpaid though due.
- Assay.**—To subject an ore to chemical examination to find the amount of any metal contained in it.
- Assess.**—To fix a certain value for the purpose of taxation.
- Assets.**—The entire property of an individual or company.
- Assignee.**—One to whom something is assigned, usually one who receives property to dispose of for the benefit of creditors.

- Assignor.**—One who assigns an interest to another.
- Assignment.**—Placing property in the hands of assignees.
- Association.**—The union of a number of persons for some special aim.
- Assume.**—To take on another's debts.
- Attachment.**—A seizure* by virtue of a legal process.
- Attest.**—To bear witness, to certify.
- Attorney (Power of).**—A written authority from one person empowering another to act for him.
- Attorney in Fact.**—An agent with full power.
- Auctioneer.**—One who sells goods at a public sale.
- Auditor.**—A person appointed to examine and settle accounts.
- Avails.**—Profits of property disposed of, proceeds of goods sold.
- Average.**—A proportional share of a general loss, also, a mean time of payment for several debts due at different times.
- Avoirdupois.**—Commercial standard of weight in United States and England.
- B**
- Bail.**—The security given for releasing a person from custody.
- Bailee.**—The person to whom goods are intrusted.
- Bailor.**—One who intrusts goods to another.
- Bailment.**—A delivery of goods in trust.
- Balance.**—The excess on one side; or what added to the other makes equality in an account.
- Balance Sheet.**—A statement in condensed form showing the condition and progress of business.
- Ballast.**—Any heavy material placed in the hold of a ship to steady it in the water.
- Ballot.**—A Swedish term signifying ten reams of paper; used also to designate a small bale or package.
- Balsa.**—A kind of float or raft used on the coast of South America for landing goods through a heavy surf.
- Banco.**—A commercial term used in Hamburg to distinguish bank money from common currency.
- Banking.**—The business of a banker, or pertaining to a bank.
- Bankrupt.**—An insolvent, one who is unable to pay his debts.
- Bank Stock.**—Shares in the capital stock of a bank.
- Barratry.**—An intentional breach of trust, particularly any fraud by the master of a ship.
- Barque.**—A three masted vessel carrying no square sails on her mizzen mast.
- Bazaar.**—A word of Eastern usage, signifying a place of exchange or general market-place, a repository of fancy articles — especially of dress.
- Beacon.**—A signal or light for the guidance of mariners; usually erected and sustained by the government.
- Bidder.**—One who bids or offers a price.
- Bill.**—A name given to statements in writing; as goods; a note; a draft; a law not enacted; exhibition of charges.
- Bill of Exchange.**—A bill ordering one party to pay another a certain sum of money.
- Bill of Lading.**—Written statement of goods shipped with terms of delivery.
- Bill of Parcels.**—A detailed account of goods sold.
- Bill of Sale.**—A formal instrument for the transfer of goods and chattels.
- Board of Trade.**—An association of business men for the advancement of commercial interests.
- Bona Fide.**—In good faith, in reality.
- Bond.**—A writing, under seal, binding a person and his heirs to fulfill certain obligations.
- Bonded Goods.**—Goods in charge of the officers of customs for the duties on which bonds are given at the custom house.
- Bonds.**—A premium, or extra sum paid for a loan, a charter, or other privilege.
- Book-Debt.**—An entry or charge on a ledger; called also an open account, in contradistinction to a written promise or note.
- Breakage.**—An allowance made by the shipper or seller on certain descriptions of fragile goods.
- Bottomry.**—A contract by which the owner of a ship pledges it as security for money loaned him.
- Bottomry Bond.**—A bond given upon a ship to secure the repayment of money borrowed.

- Broker.**—A person who transacts business for another, commonly in stocks, money, etc., using the name of his principal.
- Brokerage.**—The fee charged, for transacting business, by a broker.
- Bulls and Bears.**—Persons engaged in the gambling transactions of the stock exchange. The bulls are personally interested in *tossing up* the prices of certain goods, while the bears are fighting to *pull down* prices.
- Bullion.**—A commercial name for uncoined gold or silver.
- C**
- Capital.**—The stock employed in trade; the fruit of past labors; saved.
- Carat.**—An imaginary weight that expresses the fineness of gold.
- Cargo.**—A ship's lading, or freight.
- Cashier.**—One who has charge of money and superintends the receipts and payments.
- Centage.**—A rate by the hundred.
- Certified Check.**—A check which has been certified by the bank on which it is drawn, making the bank absolutely responsible for its payment.
- Chancellor.**—The chief judge of a court of chancery or equity.
- Charter.**—An instrument in writing from the sovereign power, or legislature, conferring certain rights and privileges.
- Charter Party.**—A written agreement by which a ship is hired under specified conditions.
- Choses in Action.**—Things of which the owner has not possession, but merely the right of legal action for possession, as notes, accounts, etc.
- Choses in Possession.**—Things in possession of the owner.
- Circulating Medium.**—Cash and bank notes payable on demand; the medium of exchange.
- Clearance.**—Permission from the custom house officer for a ship to sail.
- Clearing House.**—A kind of banking exchange for the convenience of daily settlements between banks.
- Clerical Error.**—An error in calculation or other accidental error on books or documents.
- Coasting.**—Sailing near land, or vessels trading between ports of the same country.
- Codicil.**—A supplement to a will.
- Collaterals.**—Pledges or security for loans of money, or other indebtedness.
- Commerce.**—The exchange of merchandise on a large scale.
- Commercial Paper.**—Bills of exchange, drafts or promissory notes given in the course of trade.
- Common Law.**—The unwritten law receiving its force from universal reception, as distinguished from statute law.
- Commission.**—The brokerage or allowance made to an agent or factor for doing business for another.
- Cooperage.**—Charges for putting hoops on casks or bales.
- Compact.**—A covenant or contract between different parties.
- Company.**—A number joined together to undertake some common enterprise.
- Compound.**—To adjust by agreement differently from the original terms, to settle by compromise.
- Compromise.**—A friendly settlement of differences by mutual concessions.
- Consignment.**—The act of consigning, as a charge for safe keeping and management, as goods, property, etc.
- Consignee.**—One to whom goods are intrusted.
- Consignor.**—The person who commits goods to another.
- Consols.**—In England three per cent. annuities granted at different times, and consolidated into one stock or fund.
- Consul.**—A person commissioned to reside in a foreign country as an agent of the government.
- Contraband.**—Prohibited merchandise or traffic.
- Contract.**—To make an agreement, to covenant.
- Copartnership.**—A joint interest in business.
- Counterfeit.**—To copy or imitate without authority, with a view to defraud; a forgery.
- Countersign.**—To sign in addition to the name of a superior, that of the secretary or subordinate officer, as bank notes are signed by the president and countersigned by the cashier.
- Coupon.**—An interest warrant printed at the end of bonds, to be cut off when the interest is paid.

- Court.**—An official assembly legally met together for the transaction of judicial business.
- Covenant.**—A formal contract between two or more parties.
- Coverture.**—The condition of a married woman, being considered as under the shelter and protection of her husband.
- Credentials.**—Testimonials, or certificates showing that a person is entitled to credit, authority or official powers.
- Credit.**—Trust given or received; mercantile reputation entitling one to be trusted; also the side of an account on which payment is entered.
- Creditor.**—One to whom money is due.
- Credit Mobilier.**—A name given to a joint-stock company in Paris, established in 1852, with exceptional charter privileges. The term has become familiar to intelligent persons in this country through the congressional investigation of the credit Mobilier company of the Pacific Railroad.
- Curb-Stone Brokers.**—A term applied to a class of stock operators in New York who do business on the sidewalk or pavement.
- Currency.**—That which circulates as a representative of value.
- Customs.**—Customary toll, tax, or tribute on imported or exported goods.
- Custom House.**—A building where duties are paid and vessels entered and cleared.
- D**
- Damages.**—A compensation to one party for a wrong done him by another, the estimated reparation in money for the injury.
- Days of Grace.**—Days granted for delay in the payment of a note, usually three after it is due.
- Debase.**—To lessen in value by adulteration.
- Debenture.**—A certificate given by the collector of the port of entry, to an importer for drawback of duties on imported merchandise, duties on which when the merchandise is exported, are to be refunded.
- Debit.**—A recorded item of debt, the debtor side of an account.
- Debt.**—That which is due from one person to another.
- Debtor.**—The person who owes another either money, goods, or services.
- Decimal.**—Having a tenfold increase or decrease, *Decimal Fractions*. Having any power of ten for a denominator.
- Deed.**—A sealed instrument in writing used to transfer property.
- Defalcation.**—A diminution, deficit.
- Defaulter.**—One who fails to discharge a public duty, as to account for money entrusted to him.
- Deficit.**—A deficiency; the difference between an account's statement of the assets and the assets themselves.
- Del Credere.**—A commercial term implying a guarantee of the solvency of the purchaser.
- Delivery.**—Giving money or goods to another.
- Demand.**—A preremptory urging of a claim, an exaction.
- Demise.**—To convey, to bequeath by will.
- Demurrage.**—Allowance for detention of a ship.
- Depository.**—A trustee, one to whom something is committed for safe keeping.
- Deputy.**—One appointed to act for another, a representative or delegate.
- Diplomacy.**—The science of conducting negotiations between nations.
- Discount.**—An allowance or deduction made for the payment of money before it is due.
- Discount Days.**—The days of the week on which the directors of a bank meet to consider paper offered for discount.
- Dividend.**—A percentage of profits paid to stockholders.
- Donee.**—The person to whom a gift or donation is made.
- Donor.**—One who confers anything gratuitously.
- Dormant.**—Silent partner, one who takes no share in the active business, but shares profit.
- Drawback.**—Money paid back on goods exported, a part or the whole of the duty charged.
- Draft.**—An order from one man to another directing the payment of money, a bill of exchange.
- Drawee.**—The person to whom a bill of exchange is addressed, the payer.

Drawer.—One who draws a bill of exchange, or an order for payment.

Dress Goods.—A term applied to fabrics for the garments of women and children, most commonly to those made of mixed materials, as silk and cotton, and silk and worsted, etc.

Due-Bill.—A written acknowledgment of debt; not transferable by mere endorsement.

Dun.—To press urgently the payment of a debt.

Duplicate.—A copy or counterpart of anything.

Duress.—Personal restraint or fear of personal injury or imprisonment; it nullifies all contracts into which it enters.

Duties.—A tax levied by the government on imported goods; money paid to the government on imports and exports.

E
Earnest.—A pledge, something given by the buyer to the seller to bind the bargain and prove the sale.

Effects.—Goods or personal estate.

Eleemosynary.—Founded by charity, or intended for the distribution of charity, as a hospital or college.

Ell.—An English measure of length equal to $1\frac{1}{4}$ yards; the Scotch ell is $1\frac{3}{100}$ yards.

Embargo.—A detention of vessels in port, prohibition from sailing.

Embarrassment.—Perplexity arising from insolvency or temporary inability to discharge debts.

Embassy.—The public business intrusted to diplomatic officers.

Engrosser.—One who buys large quantities of any goods in order to control the market.

Embezzlement.—To appropriate public money to private use by a breach of trust.

Emporium.—A place of extensive commerce, a market place.

Endorse.—To endorse a note by writing the name on the back.

Entrepot.—A bonded warehouse; a storeroom for the deposit of goods; a free port.

Equity.—A system supplemental to law, qualifying or correcting it in extreme cases.

Estate.—The degree, quantity, nature, and extent of interest which a person has in real property.

Estoppel.—A stop, a bar to one's alleging or denying a fact contrary to his own previous actions, allegation or denial.

Exchange.—Act of bartering; a bill drawn for money; a place where merchants meet; difference between the value of money in two places, or premium and discount arising from purchase and sale of goods.

Excise.—Taxes or duties on articles produced and consumed at home; internal revenue tax.

Executor.—The person appointed by a testator to execute his will.

Executory.—To be executed in the future.

Exports.—That which is carried out of a country, as goods and produce in traffic.

Express.—A courier; also regular and quick conveyance for packages, etc.

F
Face.—The amount expressed on a note or draft.

Factor.—An agent who buys and sells in his own name, being intrusted with the goods, in this respect differing from a broker.

Facture.—An invoice, or bill of parcels.

Failure.—Becoming bankrupt, suspension of payment.

Fac-simile.—An exact copy or likeness.

Favor.—A note or draft is said to be in favor of the payee.

Fee Simple.—In the United States, an estate held by a person in his own right and descendible to his heirs.

Finance.—Revenue, public money, income.

Financier.—One skilled in financial operations, a treasurer.

Firm.—A business house or company; the title used by a business house.

Firkin.—A measure of capacity; the fourth part of a barrel; or eight or nine gallons.

Fiscal.—Pertaining to the public treasury or revenue.

Fixtures.—The part of the furniture of a store or office which is not movable, as gas pipes and burners, partitions, etc.

F. o. b.—Free on board; the bill or invoice with f. o. b. includes the transportation to the shipping port and all the shipping expenses.

Foreclose.—To cut off by a court judgment from the power of redeeming mortgaged property.

Forestall.—To buy goods on its way to market, intending to sell again at a higher price.

Folio.—A page in an account book, sometimes two opposite pages bearing the same serial number.

Franc.—A silver coin used in France, equal to about nineteen cents.

Frank.—To exempt from charge for postage.

Fraud.—Injurious stratagem, deceit.

Free Trade.—The policy of conducting international commerce without duties.

Freehold.—Land held by free tenure, or in fee simple, subject to no superior or conditions.

Freight.—Merchandise being moved from one place to another; the price paid for carrying freight; also to load or burden.

Funded.—Turned into a permanent loan on which annual interest is paid.

Funds.—The supply of money or the capital.

G

Gain.—Advantage, acquisition, accumulation, profit.

Garbled—Drugs, spices or other goods which have been sorted or picked over and freed from impurities.

Gauging.—Measuring the capacity of casks, etc.

Gist.—The principal point of a question, the pith of the matter.

Go-between.—Agent for both parties.

Grant.—A transfer of property by deed; a conveyance made by the Government.

Gross.—Twelve dozen; *gross weight*; weight of goods including dust, dross, bag, cask, etc.

Guarantee (or Guaranty).—A security or warranty given by a third party; one who warrants.

Guarantor.—A warrantor; a surety.

H

Hebeas Corpus.—A writ to bring a party before a court, to prevent false imprisonment.

Haberdasher.—A seller of small wares, as thread, pins, etc.

Hand-book.—A book of reference; a manual.

Hand-money.—Money paid by the purchaser at the closing of a contract or sale.

Harbor.—A port or haven for ships.

Haven.—A port or shelter for ships; a harbor.

Hazardous.—Precarious, dangerous, uncertain.

High Seas.—The uninclosed waters of the ocean outside the boundaries of any country.

Hollow-ware.—A trade name for camp and kitchen utensils made of cast iron or wrought iron.

Honor.—To accept and pay when due.

Husbandage.—An owner's or an agent's commission for attending to a ship.

Hypothecate.—To pledge for the security of a creditor.

I

Impolite.—Wanting in prudent management; not politic.

Import.—To bring in from abroad.

Importer.—The merchant who imports goods.

Imposition.—Tax, toll, duty or excise prescribed by authority.

Impost.—A tax or duty imposed on imported goods.

Indemnify.—To recompense for loss, to reimburse.

Indenture.—A mutual agreement in writing.

Indorsement.—A writing on the back of a note.

Indulgence.—Extension of time of payment; forbearing to press for payment.

Inland Bills.—Draft of bills of exchange drawn on a party in the same State as the drawer.

Insolvency.—Inability to discharge debts when due.

Insurance.—Indemnity from loss; the premium paid.

Installment.—Payment of parts at different times.

Interest.—Premium paid for the use of money.

Internal Revenue.—The part of the revenue of our Government which is collected in the form of internal duties.

Intestate.—Without a will; not disposed of by will.

Inventory.—A list of merchandise made periodically for the purpose of knowing the quantity and value of unsold good, in order to ascertain the condition of business.

Investment.—The laying out of money in the purchase of some species of property.

Invoice.—A written account or bill of merchandise bought; a bill of items.

J

Jettison.—Throwing goods overboard in case of peril to lighten and preserve the vessel.

Jointure.—An estate settled on a wife at the husband's death, for her life at least.

Joint Stock.—Stock held in company.

Joint Tenancy.—Joint occupancy; not so close intimacy as partnership.

Journal.—A book used to classify and arrange business transactions.

Judgment Note.—A note in the usual form, with the addition of the power to confer judgment if not paid.

Jurisdiction.—The power of exercising judicial authority.

K

Kilogram.—The French measure of weight equal to $2\frac{1}{2}$ lbs. avoirdupois, or 1000 grains.

Kiting or Kite flying.—Exchanging checks on different banks, for the purpose of obtaining the use of money for a single day.

L

Lame Duck.—A stock broker's term for one who fails to meet his engagements.

Larceny.—Theft; taking personal property belonging to another.

Law-merchant.—The general body of commercial usages in matters relative to commerce.

Lay-days.—Days allowed for loading and unloading a cargo.

Laydown.—A phrase used to express the entire cost of a commodity, including transportation, etc., at a place remote from its production or purchase.

Lease.—Renting lands, etc.; the written contract.

Legacy.—A gift, by will, of personal property.

Ledger.—A book in which a summary of accounts is preserved.

Lessee.—One who takes an estate by lease.

Letter of Attorney.—A writing by which one person authorizes another to act in his stead, commonly called power of attorney.

Letters of Credit.—A letter authorizing credit to a certain amount to be given to the bearer.

Liability.—Obligation; debts.

License.—A grant of permission by the authorities.

Lien.—A legal claim on property for debt.

Lieu.—Instead; in place of.

Liquidate.—To clear off; to settle; to pay as debts.

Lloyds.—A marine insurance association, or society underwriters in London, deriving its name from the coffee house where it originated. The records of this society contain a complete history of the sea, so far as concerns the number of shipwrecks, collisions, fires, piracies, mutinies, etc.

Loan.—A thing furnished to another for temporary use, on condition that it be returned.

Long Price.—Price after the duties are paid.

M

Malfeasance.—Evil conduct; illegal deed.

Mandatory.—A person to whom a charge is given, or business intrusted.

Manifest.—An invoice of a ship's cargo.

Manufacture.—The process of reducing raw material into a form suitable for use.

Marine.—Relating to the ocean; nautical.

Maritime Law.—Law relating to harbors, ships, seamen.

Marc.—A weight of gold and silver used as a measure for these metals in Europe.

Mart.—A commercial center; a market-place.

Maturity.—The date when a note or draft falls due or is payable.

Mercantile Law.—Law pertaining to trade and commerce.

Merchandise.—Whatever is bought and sold in trade.

Merger.—The absorption of a thing of lesser importance by a greater, whereby the lesser ceases to exist, but the greater is not increased. For instance, a note on which a judgment is recovered is absorbed by and merged in the judgment.

Metallic Currency.—Silver and gold coins forming the circulating medium of a country.

Mint.—The place where money is coined.

Misfeasance.—A trespass; doing improperly an act that might be done lawfully.

Mitigation.—The abatement of a judgment, penalty or punishment.

Money.—Coin; any currency lawfully used instead of coin, as bank notes.

Money-Broker.—A broker who deals in money.

Monopoly.—Sole permission and power to deal in any species of goods.

Monetary.—Pertaining to, or consisting in money.

Mortgage.—To convey property for the security of a debt, the conveyance being void when the debt is paid.

Mortgagee.—One to whom a mortgage is given.

N

National Banks.—Banking institutions, established in the United States under the provisions of an act of Congress, the object of which is to unify the currency.

Navigation.—The science of conducting vessels on the ocean.

Negotiate.—To transact business; to hold intercourse in bargain or trade.

Negotiable.—Transferable by assignment or indorsement to another person.

Net.—Clear of all charges and deductions.

Net Proceeds.—The sum left after deducting commissions or discount.

Non-feasance.—An omission of what ought to be done.

Note.—A written or printed paper acknowledging a debt and promising payment.

Notary Public.—An officer whose chief business is to protest paper for non-payment.

O

Open Account.—A running or unsettled account with an individual or firm.

Open Policy.—An insurance policy covering undefined risks, which provides that its terms shall be definite by subsequent additions or endorsements.

Option.—A stock broker's term for the privilege of taking or delivering at a future day, a certain number of shares of a given stock at a price agreed upon.

Ordnance.—All kinds of large guns.

Ostensible Partners.—Those known to the public.

Out-standing Debts.—Unpaid debts.

Over.—Not covert, open, manifest.

Owe.—To be obliged to pay.

P

Panic.—A financial crisis among business men, generally the result of overtrading and speculation.

Par.—State of equality in value, equality of nominal and actual value.

Parol.—Oral declaration, word of mouth.

Partnership.—Union in business; business firm.

Pass-Book.—A book in which a trader enters articles bought on credit, and then sends it to the creditor for his information.

Passport.—A document carried by neutral merchant vessels in time of war for their protection, also a government document given to travelers, which permits the person therein named to pass from place to place.

Pawn-broker.—One who lends money on pledge or the deposit of goods.

Pay.—To make requital, to give an equivalent for goods.

Payee.—One to whom money is to be paid.

Payer.—One who pays.

Pigments.—Paints.

Pledge.—A pawn, personal property deposited as security.

Policy of Insurance.—The writing or instrument in which a contract of insurance is embodied.

Politic.—Well advised, adapted to its end.

Port of Entry.—A harbor where a custom house is established for the legal entry of merchandise.

Premises.—The thing previously mentioned; houses, land, etc.

Premium.—The percentage paid for insurance; the excess of value above par.

Price.—Current value, or rate paid or demanded in barter.

Price Current.—A printed list of the prevailing prices of merchandise, stocks, specie, bills of exchange, rate of exchange, etc.

Prima Facie.—At first view of appearance.

- Principal.**—An employer, the head of a firm; a capital sum placed at interest.
- Procuration.**—A power of attorney; an instrument empowering one person to act for another.
- Pro Rata.**—A proportional distribution.
- Protest.**—A formal declaration, made by a notary, for want of payment of a note or bill of exchange.
- Quarantine.**—To prohibit a ship from intercourse with shore, when suspected of having contagious diseases on board.
- Quasi.**—As if, in a manner, in a certain sense.
- Rate.**—The ratio or standard.
- Real Estate.**—Property in houses and lands.
- Rebate.**—Deduction on account of prompt payment, discount.
- Receipt.**—An acknowledgment of payment in writing.
- Reciprocity Treaty.**—A commercial treaty between two nations securing mutual advantages.
- Reclamation.**—A claim made against the seller of goods which prove deficient or defective.
- Refund.**—To repay; to restore.
- Reprisal.**—The act of seizing ships or property as indemnity for unlawful seizure or detention.
- Resources.**—Available means, funds.
- Respondential Bond.**—A pledge of a cargo at sea.
- Retail.**—Selling goods in small quantities.
- Retire.**—To take up one's note before due, to relinquish business.
- Revenue.**—Income, return; annual income of a nation for public uses.
- Revenue Cutters.**—Small vessels employed to aid revenue officers in the collection of duties, or to prevent smuggling.
- Revocation.**—The act of calling back, recalling some power or authority conferred.
- Salvage.**—A compensation allowed to persons for voluntarily saving a ship or her cargo from peril.
- Sea-worthy.**—Fit for sea; a ship worthy of being entrusted with a cargo.
- Sans recours.**—Without recourse.
- Secondarily.**—Applied to the endorser of a note or drawer of a bill, signifying that he is only conditionally liable, or liable, if the maker and drawee fail.
- Seize.**—To take possession of, by virtue of a warrant or legal authority.
- Seller's option.**—A term mostly confined to the sales of stocks, for a sale which gives to the seller the option of delivering the article sold within a certain time, the buyer paying interest up to delivery.
- Shipment.**—That which is shipped, embarkation.
- Sight.**—Time of presenting bill to the drawee.
- Signature.**—The name of a person written with his own hand, signifying his consent to the writing above it.
- Sinking Fund.**—A fund set apart from earnings or other income, for the redemption of debts of government, or of a corporation.
- Sleeping partner.**—One who shares the profits of a business without letting his name appear, or taking part in it actively.
- Slop-shop.**—A store where cheap ready-made clothing is sold.
- Smuggler.**—One who avoids the payment of duties by secretly importing goods into a country; a vessel engaged in smuggling.
- Solicitor.**—An attorney or advocate, the title of a person admitted to practice in the court of chancery or equity.
- Solvency.**—Ability to pay all debts or just claims.
- Specialty.**—A contract or obligation under seal.
- Statement.**—Usually a list of property, or resources and liabilities.
- Statistics.**—A collection of facts arranged and classified.
- Statute.**—A positive law, established by act of Legislature.
- Stipend.**—Settled pay or compensation for services.
- Stipulation.**—A contract or bargain.
- Stock.**—Money invested in business.
- Stocks.**—Property consisting of shares in joint stock companies.
- Stock Broker and Jobber.**—A broker who deals in shares or stocks.
- Stoppage in transitu.**—The seller of goods upon credit resuming possession after their shipment before they get into actual possession of the buyer.
- Sue.**—To seek justice by a legal process.
- Surcharge.**—An overcharge.
- Surety.**—A bondsman, a bail, security.

- Suspense Account.**—An account used to contain balances of personal accounts which may be considered doubtful.
- Sutler.**—An authorized vender of provisions, etc., to soldiers in camp or garrison.
- Tacit.**—Implied but not expressed.
- Tally man.**—One who receives payment for goods in weekly installments.
- Tare.**—An allowance in weight for the cask in which goods are contained.
- Tariff.**—A list of duties to be imposed on goods imported or exported.
- Tax.**—A levy made upon property for the support of the government.
- Teller.**—An officer in a bank who receives or pays money.
- Tenants in Common.**—Persons holding lands etc. by several and distinct titles, and not by joint title.
- Tenant.**—One holding property under another.
- Tenement.**—That which is held.
- Tender.**—To offer or present for acceptance.
- Tenure.**—The manner of holding property in lands.
- Testator.**—The person leaving a valid will.
- Textile Fabrics.**—All kinds of woven goods, generally restricted to piece goods.
- Tickler.**—A book containing a memoranda of notes and debts arranged in the order of their maturity.
- Time draft.**—A draft maturing at a future specified time.
- Tonnage.**—The weight of goods carried in a boat or ship.
- Tort.**—Mischief, any wrong or injury.
- Trade Discount.**—An allowance or discount made to a dealer in the same trade.
- Transact.**—To perform commercial business, to conduct matters.
- Transfer.**—To convey right, title, or property.
- Tranship.**—To transfer merchandise from one conveyance to another.
- Treasury.**—A place where public revenues are deposited and kept.
- Treasury Notes.**—Notes of various denominations issued by the government, and received in payment of all dues, except duties on imports.
- Tret.**—An allowance to purchasers for waste of 4 lbs. on every 104 lbs. of weight after the tare has been deducted.
- Trustee.**—One who is entrusted with property for the benefit of another.
- Ultimo or Ult.**—Last month.
- Uncurrent.**—Not current, not passing in common payment, as uncurrent coin, notes, etc.
- Underwriter.**—An insurer, so-called because he underwrites his name to the conditions of the policy.
- Usage of Trade.**—Custom, or the frequent repetition of the same act in business.
- Usance.**—Business custom which is generally conceded and acted upon.
- Usury.**—Exorbitant interest, formerly merely interest.
- Valid.**—Having legal strength or force.
- Value.**—Rate of estimated worth; amount obtainable in exchange for a thing.
- Vend.**—To sell.
- Vendee.**—The person to whom a thing is sold.
- Void.**—Null, having no legal or binding force.
- Voidable.**—Having some force, but capable of being adjudged void.
- Vouchers.**—A paper attesting the truth of any thing, especially one confirming the truth of accounts.
- Wages.**—Hire, reward, salary.
- Waiver.**—The act of waiving; of not insisting on some right, claim, or privilege.
- Wares.**—Goods, merchandise, commodities.
- Warrant.**—A precept authorizing an officer to seize an offender and bring him to justice; also to insure against defects.
- Water-logged.**—Said of a ship when she has received so much water into her hold by leakage as to become unmanageable.
- Way-bill.**—A document containing a list and description of goods sent by a common carrier by land.
- Wharfage.**—Fee or duty for using a wharf.
- Wharfinger.**—The proprietor of a wharf.
- Wrecker.**—One who searches for the wrecks of vessels.
- Wreck-Master.**—A person appointed by law to take charge of goods etc. thrown ashore after a shipwreck.

Alphabetical Index.

	PAGE		PAGE
A bbreviations, business.....	407	Carpets, how many yards requir-	
Accounts, (Farm) how to keep...	246	ed for a room.....	343
Addition, an easy way of.....	362	Cash book, 241; Form of.....	246
Addition, lightning method of.....	363	Casks, how to find contents of...	337
Addition, civil service method.....	364	Cattle, weight by measurement....	3:5
Advice by great men.....	13, 42-44	Certificate of stock.....	232
Agent, how to do business with an	195	Change, how to make quickly. ...	254
Agreement for hiring a clerk.....	167	Cancellation, how to determine	
Agreement to build a house.....	174	results by.....	356
Agreement to cultivate land on		Cancellation, how to figure all	
shares.....	188	kinds of produce by.....	357
Alphabet for marking boxes.....	70	Cancellation, how to figure plas-	
Ancient money, value of.....	305	tering by.....	358
Arbitration.....	205	Checks, how to write and indorse	
Arbitration best for farmers.....	206	.....	131, 148
Arithmetic, short rules of.....	359	Checks, different forms.....	132-149
Australian system of voting.....	370	Children, illegitimate.....	173
Astor, John Jacob, buying furs... 16		Cisterns, how to find contents of..	339
Arguing the case of a lost note..	155	Clearing-house system.....	225, 226
Affidavits, how to write.....	198	Coal, weight of in bin or box.....	285
A pleasant walk.....	14	Correct position of the pen.....	46
		Contracts, how to write.....	159
B ookkeeping, rules for.....	234	Contracts, laws governing.....	160
Bookkeeping, how to learn... 233-245		Contracts not lawful.....	161, 162
Banking, how done.....	140, 141	Cattle and hog tables.....	398-400
Behind time.....	19	Contract for hiring farm-hand....	165
Bank, how to do business with a... 139		Contract for renting farm.....	166
Banker's Time Table.....	288	Contract for the sale of horses,	
Barrels, how to find contents of... 337		cattle, etc.....	175
Bill of Sale.....	179	Contract for laying tile, building	
Board and plank measurement.....	348	fence, etc.....	175
Board of Trade.....	221	Corporations & stock investment..	231
Bookkeeping, legal points on.....	247	Counterfeit money, how to de-	
Brick work, facts concerning.....	341	tect.....	223
Business.....	37	Corn, how to measure in crib.....	331
Business, how to do.....	37	Credit system.....	253
Business dictionary.....	408	Criminal law, terms and facts of..	207
Business energy.....	4	Character, the test of.....	27, 28
Business letters, how to write.....	81	Court room.....	116
Business manners.....	36	Chinese court.....	153
Business maxims.....	40, 41	Contract, the vital parts of a...163, 164	
Business, teaching wives and			
daughters.....	227	D eaf and dumb alphabet.....	76
Boys with a future.....	8	Debts, how to collect.....	252
Breaking home ties.....	10	Debts, time when outlawed.....	256
Business, doing legal.....	150	Debts, property that cannot be	
Business qualifications.....	29, 30	taken for.....	255
Business writing.....	48-54	Deeds, all about.....	189
		Detecting the forgery.....	157
C heering the owner of a winning		Demand of payment.....	156
horse.....	265	Drafts, all about.....	137, 138
Credit, how to ruin.....	18	Divorce laws.....	213-212
Cards, how to write.....	113, 114	Discounting note at a bank.....	122
Capitals, the use of.....	78	Due-bills.....	56, 136
Carpenters rules.....	352	Day book.....	238-240

	PAGE		PAGE
E ducation.....	38	How to multiply by eleven.....	359
Election laws.....	371	How to write your name on iron,	
Envelopes, how to address.....	88	tools and glass.....	387
Estray notice.....	263	How to transfer all kinds of pa-	
Evener, advantage by changing....	333	per.....	154-156
Exemption laws.....	255	How stock is watered.....	223
Evarts, Wm. M.....	260	I mportant test cases, Findings of	
F ranklin, Benjamin.....	2	courts in.....	404
Familiar notes.....	102	Indorsements, different forms of	
Family instruction.....	42	.....	128-130
Fictitious names of States.....	278	Interest, legal helps and hints.....	286
Field measuring, rapid.....	365	Interest, lightning method.....	287
Field, simple way to lay off in		Interest, banker's method.....	288
angles.....	366	Interest tables, how to use.....	289-295
Foreign gold and silver coins,		Interest, time at which money	
value of.....	306	doubles at.....	296
Fuller, Chief Justice.....	211	Interest laws of the U. S. and	
Freight cars, carrying capacity....	324	Canada.....	298
Forged paper, the law governing..	158	Interest, compound, application	
Forgery, detecting the.....	157	of.....	299, 300
G ambling and betting.....	265-267	Interest, how money grows at.....	301
Get into the right place.....	38	Interstate Commerce Law.....	382
Gold and silver, weight and value.	361	Interstate Commerce Map.....	381
Good manners.....	34	Introduction.....	3
Grain, legal weight of.....	329	Invitation, notes of.....	110-112
Grain, how to figure up a load.....	326	J ackson's first lesson in farming..	20
Grain, amount in bin or box.....	336	Joist, scantling and timber meas-	
Grain-tables, how to use.....	326-328	urement.....	347
Guarantees, how to write.....	199	L adies' letter-writer.....	103-109
Guarantees, forms of.....	200	Land, how to survey, locate and	
Gifts, legal.....	178	find area.....	279-285
H ay, to measure in stack.....	332	Laths, amount needed for a room..	346
Holidays, legal.....	211	Land contract.....	166
Homestead Laws.....	282	L aw Governing Mine and	
Honesty.....	33	Miners.....	422, 423, 424
Hog and Cattle weight tables, 399,	400	Leases.....	185-187
How to use " ".....	398	Ledger.....	242-244
How to find the contents of a		Letters, all kinds of business....	91-99
wagon-box.....	336	Letter, how to begin and close a	84-87
How to secure an appointment under		Liabilities of Railroad and Ex-	
civil service law.....	394	press Companies.....	389, 390
How to write.....	45	Lien, mechanic's, how to secure..	203
How to find the day of the week	311	Lien, form of a mechanic's.....	204
How to measure a day's work in		Lincoln, Abraham, home of.....	33
the corn-field.....	342	Log table, how to use.....	360
How to find the number of brick		Log, number of feet in a.....	351
for a wall or chimney.....	341	Lost property, law on.....	170
How to find the amount of paper		Lost notes, the law governing.....	153
for a room.....	343	Lost note, receipt for a.....	152
How to find the cost of coal, hay,		Lumber, weight of.....	346
etc., at sight.....	330, 401	Lumber tables.....	347-350
How to estimate the contents of		Lumber, lightning method of	
a pile of grain.....	325	measuring.....	345
How to make a curve with a set		Lumbering in Northern Michigan	349
triangle.....	354	M arried women, rights to own	
How to make curves for brick and		property.....	391
stone arches.....	355	Marking goods, merchants' meth-	
How to succeed.....	7	od.....	250, 251
How to find the height of a tree..	355	Marriage contract.....	168-170
		Maxims, practical.....	12

	PAGE		PAGE
Misrepresentation, never pays.....	40	Punishment, corporal in schools...	218
Money-making and money-getting	25, 26	Punctuation	79
Money, how to send by mail.....	303	Pleasant walk a.....	14
Money, how to send to other countries.....	304	Presumption of law pertaining to business papers.....	150, 151
Money order fees, international...	305	Quit claim deed	197
Metric system.....	310	Rafters, how to find length of	354
Mensuration, short cuts in.....	366-369	Railroad train, speed of.....	389
Money, how to change English to U. S.	304	Rapid methods in business calculation.....	322
Mortgages, forms and laws	180-182	Ready reckoner.....	234-238
Mortgages, chattel, how to write, with forms..	183, 184	Receipts, how to write.....	133
Multiplication, short methods, 359-361		Receipts, different forms... 56, 59,	134, 135, 144
Newspapers, law of subscription ...	302	Refinement in business.....	31
Notes, how to write, collect and transfer.....	119-121	Remember it well.....	13
Notes, how to discount.....	122	Remittance.....	90
Notes, forms of.....	123-125, 146, 147	Resolutions, how to write.....	115
Notes, how to endorse.....	128-130	Reply to an inquiry with recommendation.....	89
Number of pounds to the bushel..	329	Responsibility of owning a Dog ..	405
Old-time Justice of the Peace	163	Riches and charity.....	8, 9
Observations	344	Rights of way, all about.....	260-262
Orders, how to write.....	135, 136	Runaway Horses and teams, Responsibility in.....	402
Order for goods.....	53, 98	Road, laws of the public.....	258
Opening of letters, law on.....	170	Road, petition for laying out and changing.....	259
Ornamental Alphabet	69	Road, notice to work on.....	185
Parent and child, legal relation of	171-173	Security for rent	187
Paints, how to mix.....	385	Shingles, lath, wood, etc.....	346
Painting rules.....	386	Signing name, never sign for a stranger.....	264, 271
Partnership, rules and laws of.....	201	Sign name in full.....	209
Partnership, articles of and dissolution of.....	202	Signing name, married woman.....	209
Parliamentary rules.....	383	Signing name, person who cannot write.....	210
Patents, how to secure.....	393	Signing, read before.....	273
Penmanship, plain and ornamental	48-72	Shorthand.....	73-75
Penmanship, business.....	77	Situation, how to apply for.....	100
Penmanship, how to improve.....	80	Spelling, rules for.....	78
Property, law for sale and transfer	176	Smoking, cost of.....	397
Property, giving away.....	229-230	Standard Oil Company.....	296
Picket fence, level or over a hill....	353	Subscriptions to build churches, bridges, etc.....	257
Plastering.....	249, 272	Success, practical rules for.....	32
Ploughing, distance traveled in.....	344	Swindling schemes.....	264
Population of the different States	380	Swindling schemes, six rules to remember	264
Population of principal cities..	373-379	Swindling note.....	268
Power of attorney.....	194	Swindle, jewelry.....	269
Postage, foreign.....	307	Swindle, counterfeit money.....	270
Poor boys and great eminence	11, 12	Swindle, barb wire.....	271
Politeness.....	36	Swindle, patent fence.....	272
Popping the question.....	168	Swindle, lightning-rod.....	274
Payment, demand of.....	156	Swindle, farm machinery.....	275
Practice, safe principles to.....	117	Swindle, card.....	276
Postal cards, how to write.....	79	Swindle, envelope.....	277
Printing press, the first.....	302	Swindler securing signature	271
Public schools, laws governing.....	216		
Public schools, contracts.....	217		

	PAGE		PAGE
Statement.....	245	Washington's boyhood.....	23
Stone-work, facts concerning.....	334	Washington on swearing.....	23, 25
Sundays observed by different na- tions.....	388	Washington, George.....	119
Supercriptions, forms of.....	88	Worry in business, effects of... 14,	15
Superstitions, old.....	388	Watering-trough, contents of.....	340
Surveying compass, and how land is surveyed.....	279	Weight and price tables of Prod- uce, Ice, Stone, Hay, Iron, Coal, Bran, Millfeed, Cotton etc., 330,	401
Tables of weights and measures... 308		Weight of gold and silver.....	361
Tables, miscellaneous.....	309	Weight, legal, of grain etc. in dif- ferent States.....	329
Table, monthly wage.....	313-315	What to do.....	39
Table, weekly wage.....	316	What is their future?.....	267
Tanks, to find contents of.....	338-340	Wealth, how to obtain.....	254
The Tramp's return.....	24	Wife living apart from husband, authority of.....	392
Tile, carrying capacity, area and weight of.....	323, 324	Wills, how to write.....	192
Time, Difference of, between Wash- ington and other principal cities in the world.....	406	Wills, law of.....	193
Townships with sections.....	281	Will, form of.....	194
To young men.....	21, 22	Wire fences.....	325
Trading, the law on.....	177	Wire fence materials.....	325
Transgressor, the way of the.....	207	Wood, number of cords in a pile... 346	
Trespassing animals.....	404	Wood, how to measure.....	351
Trial balance, how to detect er- rors in.....	236	Working his way to the front.....	5
Trusts.....	296	Working on holidays.....	212
Vanderbilt, Cornelius.....	32	Writing the early law.....	212
Voting, Australian system.....	370	Y Your reputation.....	6
View of the Capitol at Washington 396		Young Garfield watching with a sick neighbor.....	39
		Young Lincoln starting to school.. 6	
		Young Peabody sawing wood.....	27



EARLY CALIFORNIA MINING.

LAW GOVERNING MINE AND MINERS.

1. **The General Rule.** Laws differ in different states and territories, but there are some general principles and general laws which apply to all the states and territories. The first thing a prospector should do is to find under which laws the territory or state is governed, and then by inquiry determine the steps necessary in order to legally locate the claim. But the following principles will apply to all unless recent changes have taken place.

2. **How to Stake Off a Claim.**—If there is evidence of mineral in paying quantity, and the property is not owned by a private party, the miner is entitled to stake off the land, and he is entitled to it according to the law of the state or territory in which the ore is found. Caution must be taken to stake off the claim and give correct boundaries, or an application for patent will be refused. The claim must be located according to law, and publications made by inserting the notice in some weekly newspaper for ten consecutive weeks, and a notice must be posted on a conspicuous part of the claim staked out.

3. **An Adverse Claim.**—An adverse claim to be effective must be made out in proper form and filed in a proper legal office during the period of publication of the application for the patent. The adverse claimant must commence suit in proper form within the required time, and runs a risk if he trusts the uncertainty of the United States mail. He must set forth in detail the facts on which he bases his adverse claim.

4. **A Foreigner.**—A foreigner may make a mining location and dispose of it if he becomes a citizen before disposing of the mine.

5. **A Prospector.**—A prospector with a discovery claim is allowed sixty days to sink a discovery shaft to the distance of ten feet. At the place of discovery it is customary to post a notice like this.

6. **Lawful Survey Made.**—After sinking the shaft ten feet the miner will, if possible, have a competent and lawful survey made. But without a survey the claim will be defined sufficiently to enable a record to be made if it is marked off by stakes driven into the ground or supported by a pile of stone around each. The next step is to have a record made in the recorder's office of that county.

7. **The Term.**—The term of a mining tunnel, ditch or mining company cannot exceed twenty years. No miner has a right to undermine the improvements of another unless by legal permission. A copy of mining laws in each district will be found at the county clerk's office in the district where the mine is located.

8. **Right of Way.**—Miners have the right of way across any claim when hauling quartz. Water may be brought across any claim road or ditch or other mining improvement, provided it is so guarded that it does not interfere with the prior rights of another.

9. **In Locating a Placer.**—In locating a placer (that is, surface or loose dirt) claim, the amount of land is limited to 20 acres to one person. An association of eight persons may locate 160 acres.

10. **Citizens of the United States.**—To secure claims from the government the miner must be a citizen of the United States or have legally declared his intention to become such.

11. **Destroy or Remove Location.**—Any person who shall destroy or remove location stakes, except on abandoned property, shall be liable to a fine of \$1,000 and one year's imprisonment.

12. **Jumping a Claim.**—The person jumping a claim owned by another and gaining the same by threats or vio-

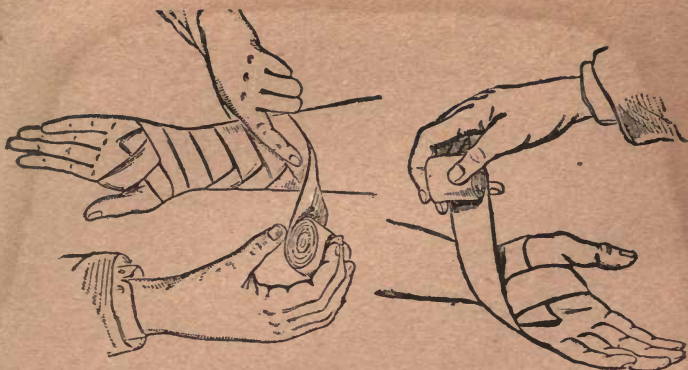
lence shall be liable to a fine of \$250 and imprisonment in the county jail for six months.

13. **United States Law.**—The United States law allows five acres to be taken as a claim for a mill site, but the site must not be upon known mineral lands. Sometimes the district regulations restrict the amount to much less dimensions.

14. **Change the True Value.**—Any person engaged in milling, sampling, reducing, shipping or producing ores, who shall knowingly change the true value of the same, whereby the owner of such ore shall not obtain its true value, shall be liable to a fine of \$1,000 and one year's imprisonment.

15. **"Salting."**—"Salting" a claim, that is, taking ore from another mine and placing it in the one that is to be sold, thereby deceiving the purchaser, is punishable by a fine of \$1,000 and confinement in the state prison fourteen years.

16. **Liable to a Fine.**—The superintendent, manager or owner of a quartz mill, mill furnace or cupel, engaged in extracting ore, who shall neglect or refuse to account for and pay the owner of the quartz or mineral all sums which shall be due, except such as may be retained for services, shall be liable to a fine of \$1,000 and imprisonment not exceeding one year.



HOW TO MAKE AND APPLY ALL KINDS OF BANDAGES.

THE HOUSEHOLD GUIDE, or Home Remedies and Safe Treatment,

By PROF. B. G. JEFFERIS, M. D., PH. D.,

One of Chicago's Most Eminent Physicians, assisted by other
Noted Specialists.

A Book Abreast of the Times.

A Complete Home Book of Medicine and Hygiene. A Complete Guide for the Prevention and Cure of Disease. A Complete Manual on Home Remedies and Treatment. A Complete Cyclopedic of Miscellaneous Receipts and Trade Secrets. A Complete Treatise on the Diseases of Horses, Cattle, Sheep and Poultry. A Complete Manual on the Extermination of House and Garden Insects. A Complete Medical Dictionary. The Training and Treatment of the Horse is a Special Feature of the Work.

Every Housekeeper Needs It.

It treats on Cooking for the Sick Room and the making of all kinds of refreshing and nourishing drinks for the sick. How to make all kinds of poultices. How to give all kinds of baths. How to treat all kinds of injuries, bruises, sprains, etc. It gives all the different kinds of home remedies for the different diseases and how to prepare and apply them. Complete directions for giving medicine; Taking care of the sick; Rules on ventilation; Healthy homes; Care of the house, etc.

In one vol., 12 mo., silk cloth, gilt letters; over 250 illustrations; printed on special paper. Price, \$1.00. Send for sample copy, if not satisfactory money promptly refunded, postage at our expense. Address,

NORTH-WESTERN BUSINESS COLLEGE, Naperville, Ills.

 SEND FOR CIRCULARS.

NORTH-WESTERN COLLEGE,

NAPERVILLE, ILLINOIS.



Comprising seven departments, COLLEGIATE, PREPARATORY, ACADEMIC, GERMAN, COMMERCIAL, MUSICAL and ART, each offering superior advantages in its special line. The COLLEGIATE department presents to the student the option of four parallel courses of study, each extending through four years,—the CLASSICAL, the PHILOSOPHICAL, the SCIENTIFIC, and the Course in MODERN LITERATURE. These courses are broad and liberal; elective studies are extensively introduced in the Junior and Senior years. The ideals of the Institution are high and its work is thorough.

The latest and most approved methods of instruction are employed, and the development of character is ever recognized as an essential part of its work. It is distinctively a Christian Institution without being sectarian in its polity.

Its location is unsurpassed for beauty and healthfulness, and being situated in the very heart of the Country, is easily accessible from all points.

Expenses are low, and less than at most Colleges offering equal advantages.

For Catalogues and Circulars address,

Rev. H. J. KIEKHOEFER, A. M., Acting President,
or Rev. J. LERCH, Treasurer.

THE FARMER'S MANUAL

... AND ...

COMPLETE AGGOUNT BOOK,

By J. L. NICHOLS, A. M.,

Principal of North-Western Business College,

ASSISTED BY THE BEST VETERINARY AUTHORITIES IN THE
UNITED STATES.

IT CONTAINS OVER

- 100 Lessons in Keeping Farm Accounts.
- 100 Lessons in General Book-keeping.
- 100 Lessons in Business Law.
- 100 Lessons in Filling out Blank Forms.
- 100 Lessons in Business Forms.
- 100 Lessons in Plain and Ornamental Penmanship.
- 100 Lessons in Training and Taming of Horses.
- 100 Lessons in Breeding and Doctoring Horses.
- 100 Lessons in Doctoring Cattle, Hogs, Sheep and Poultry.
- 100 Lessons on Insects Injurious to Vegetation.
- 100 Lessons on the Different Methods of Insect Extermination.
- 100 Lessons in Spraying Trees, Shrubbery, Garden Vegetation.
- A Complete Set of Breeders' Tables, Wages Tables, etc., etc.
- A Complete Removable Farmer's Record and Account Book.

THE PAGES ARE FOUR TIMES THE SIZE OF THE BUSINESS GUIDE.

PRICE.

BEST SILK CLOTH, -	-	-	-	-	\$1.75
HALF RUSSIAN LEATHER,	-	-	-	-	2.25

Send for Circulars and Full Description.

AGENTS WANTED.

Address

NORTH-WESTERN BUSINESS COLLEGE,
NAPERVILLE, ILL.

